

# A Brief Understanding of Weather and Climate

*Geography Educators' Network of Indiana*  
*Spring, 2007*

**From:** A variety of educators' classroom applications

**Purpose:** In order to understand the difference between weather and climate, students will engage in a hands-on classroom activity, track the daily weather for one week, and compare current weather to historical climate data.

**Grade Level(s):** 1-5 (upper grades with modifications)

**Days/Sessions:** 9-10

## National Geography Standards:

1. How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.
17. How to apply geography to interpret the past.
18. How to apply geography to interpret the present and plan for the future.

**Objectives:** Upon completion of this activity, students will be able to...

1. define weather,
2. define climate,
3. explain the relationship between weather and climate,
4. act out appropriate behaviors in various weather conditions,
5. spell various weather terms,
6. observe daily weather conditions (including precipitation, clouds, wind), and
7. compare current and historic climate data.

## Materials Required:

- one piece of wood (or corkboard)
- one small nail/thumb tack
- cut-out of weather wheel (see attached Power Point file)
- cut-out of weather wheel arrow (see attached Power Point file)
- copy of 7-day weather log for each student
- copy of historical weather data for the same week for each student

## Key Words:

atmosphere	climate	hail	precipitation	weather
average	clouds	hot	rain	wind
blizzard	cold	mild	snow	
breezy	gusty	observe	temperature	

## Prior to Class:

You must put together the "Weather Wheel" so that it spins. Cut the "Weather Wheel" and the arrow out. Glue the "Weather Wheel" onto heavier paper or poster board. Cut the final, sturdier product out. Place the "Weather Wheel" onto either a piece of wood or a corkboard by placing a nail or a thumbtack through the center, so, that it is tightly in place – yet make sure that the "Wheel" spins freely. Glue (or tack) the red arrow to the right of the "Weather Wheel" so that it aims toward the "Wheel" in the 3:00 position. Check to be sure that the "Wheel" spins easily (yet securely) and that the red arrow easily indicates a category on the "Wheel".

## **Procedures:**

### **Day 1**

1. Discuss the term weather with the students. Define the term weather as “the current condition of the atmosphere” (Rosenberg, “The Handy Geography Answer Book”; 2005, ISBN 1-57859-105-8).
2. What is the weather currently like? How was the weather this morning? Yesterday afternoon while on the playground? Last weekend? What do you think that the weather will be like tomorrow? Over the coming weekend?
3. In general, what is the weather like, locally, in the spring? Summer? Fall? Winter?
4. What types of clothing do we wear to protect against the weather?
5. Let’s play a game using the “Weather Wheel”. Each student will get a turn to spin the “Wheel”. We will act out appropriate behavior for each category on which the “Wheel” lands. For example, the “Wheel” spins and stops so that the red arrow points to hail; students act out appropriate behavior if they are in a hailstorm. From the Fall, 2007 “Boy Scouts” magazine.

### **Day 2**

6. Distribute the “7-Day Weather Tracking” chart. Discuss the chart and the assignment with the students. Complete *Day 1* together. Hopefully, the students can do the chart as homework with a parent or guardian. If not, do the chart as a group during class by reading the weather in the newspaper or by looking up weather information on the National Weather Service web site (<http://www.nws.noaa.gov> or [www.weather.gov](http://www.weather.gov)).

### **Days 3-9**

7. Upon completion of the “7-Day Weather Tracking” chart, discuss the results as a group. Notice any patterns or highlights or extremes. Relate to the “Weather Wheel” and behavior – what did we wear? What activities did we engage in during this weather time?

### **Day 10**

**Prior to Class:** Visit the National Climate Data Center

(<http://www.ngdc.noaa.gov/nndc/struts/form?t=101243&s=5&d=10>) website and select historical weather for your location, for the same month as the “7-Day Weather Tracking” chart. The data is “averaged” for each month, and you can select temperature or precipitation according to state, county, city or zip code.

8. Next, distribute two to three sets of weather data for similar weeks/months but historical. Explain the appearance of the weather data and the fact that the data is “averaged” (or “mean” for older students).
9. Discuss the historic weather data. Compare the historic weather data to the data collected by the students in their “7-Day Weather Tracking” charts. Notice any patterns? Any extremes? Any differences? GENERALLY, the weather is similar for any give time frame (dates) for a given location within recent human history. If we observe the historic data and the current data, what conclusions can we draw about the climate for that time period? What predictions would we make for next year’s weather forecast for the same dates? And predictions for the same dates two, five, ten, twenty years in the future? This is the beauty of understanding climate! It enables humans to study a location and to make better predictions about future events in said location.
10. Write a paragraph (at least three to five sentences) about the relationship between weather and climate including the observations that you made for your location.

## **Assessment / Evaluation:**

1. Completion of the “7-Day Weather Tracking” chart.
2. Participation in the “Weather Wheel” classroom activity.
3. Clear expression of Objectives 3, 6, and 7 above in a short paragraph.

## **Adaptations/Extensions:**

1. Utilizing climate data from the National Climate Data Center, compare and contrast cities (yearly, and change over time) from the various climate zones throughout the United States.
2. Create parallel bar graphs (“Create a Graph” web site <http://nces.ed.gov/nceskids/createagraph/default.aspx>) noting the temperature and precipitation changes over time at one location or at various locations. Discuss observations that the students make in the data.
3. Students can move into creating climographs for various locations (climate zones) around the world.

**Resources:**

1. Sierra College Math Department has available downloadable “graph paper” to save to your hard-drive or to print directly: <http://math.sierracollege.edu/graphpaper/graphpaper.asp> .
2. A climograph can be found at the GENI web site (<http://www.iupui.edu/~geni> and search under Lesson Plans, alphabetical to “C” for climograph).
3. The one-inch block paper used, traditionally, at the elementary levels can be great at all grade levels in order to ensure that all students have the base knowledge that you wish them to have.

**Bozeman, Montana Monthly Mean Temperature (C)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1868	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	18.4	10.7	7.1	1.2	-2.1
1869	-5.0	-2.6	-0.7	5.6	15.4	18.0	21.1	20.7	13.7	5.7	2.7	-2.6
1870	-4.7	-0.2	-3.3	7.7	13.7	19.3	20.8	15.2	13.4	5.9	2.8	-6.2
1871	-0.7	-4.8	-999.9	4.7	8.3	17.2	19.3	16.3	13.8	6.8	-3.9	-10.8
1872	-7.7	-8.2	-2.8	1.6	9.1	14.4	15.8	-999.9	-999.9	6.7	-3.7	-7.3
1873	-4.8	-8.9	3.4	1.6	8.5	13.8	21.3	18.8	9.7	2.6	0.2	-11.1
1874	-5.5	-6.9	-4.1	4.3	11.9	13.8	21.9	17.7	11.2	6.9	-4.8	-3.9
1875	-17.8	-5.1	-2.9	3.6	10.1	13.8	20.6	18.4	12.4	8.7	-2.9	0.4
1876	-7.9	-0.5	-2.2	4.9	9.5	14.4	17.8	15.8	12.7	6.9	-1.2	-5.4
1877	-8.2	-0.5	0.6	4.1	8.8	13.4	19.9	20.6	-999.9	4.4	0.0	-4.2
1878	-3.6	-1.2	3.7	4.9	8.7	16.0	20.3	20.3	9.2	4.1	2.6	-7.9
1879	-8.3	-5.8	0.3	7.9	10.4	14.3	19.1	19.3	13.9	7.9	-0.9	-8.9
1880	-3.5	-6.9	-5.2	2.7	8.5	13.9	17.6	17.9	12.3	5.8	-8.7	-10.4
1881	-9.6	-4.3	1.8	6.3	12.4	15.9	20.6	18.2	9.0	1.7	-4.5	-3.6
1882	-9.2	-6.2	-3.6	3.7	8.9	14.9	19.0	21.8	12.8	-999.9	-3.9	-4.4
1883	-9.8	-11.6	-0.6	-999.9	7.4	15.8	17.7	17.5	13.3	1.6	-0.6	-3.2
1884	-8.2	-10.6	-2.5	3.9	11.8	17.4	17.7	18.6	8.8	6.9	1.8	-15.8
1885	-7.3	-4.3	1.2	5.9	10.2	14.7	18.8	16.8	12.4	7.7	3.3	-0.5
1886	-10.9	0.6	-2.5	4.9	12.9	16.6	21.6	20.1	-999.9	-999.9	-999.9	-999.9
1892	-999.9	-999.9	-999.9	4.6	9.7	14.7	19.7	-999.9	14.4	6.9	1.9	-6.6
1893	-5.6	-9.5	-2.7	2.8	9.2	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9
1894	-999.9	-999.9	-999.9	5.6	11.8	14.6	17.8	18.7	11.4	6.4	4.0	-4.8
1895	-6.9	-7.1	-0.4	7.3	10.5	12.7	17.9	17.2	10.8	6.5	-1.7	-6.1
1896	-4.2	-0.3	-1.8	4.2	8.7	16.9	19.2	17.3	10.7	7.6	-4.6	0.9
1897	-8.2	-3.9	-4.5	6.9	14.2	15.3	17.8	20.1	14.9	7.2	-2.1	-5.4
1898	-7.1	-0.4	-3.3	7.4	9.9	15.3	17.9	20.1	12.3	-999.9	-999.9	-999.9
1900	-0.7	-6.4	2.8	6.4	11.9	17.7	17.5	16.2	11.7	6.4	-1.2	-1.1
1901	-5.3	-6.4	0.3	4.2	12.3	11.0	20.2	19.2	8.6	9.4	3.4	-3.8
1902	-6.6	-1.8	-1.2	4.5	10.9	12.8	16.0	16.3	11.1	7.9	-0.4	-4.7
1903	-3.2	-7.6	-2.4	3.3	8.4	15.3	15.2	17.3	10.2	8.6	-2.7	-3.7
1904	-5.2	-5.3	-3.8	5.5	9.0	12.9	16.8	17.6	12.6	7.9	3.9	-3.5
1905	-6.3	-8.4	2.1	4.7	7.3	11.6	17.3	17.9	14.0	3.7	-0.3	-5.0
1906	-3.8	-3.4	-5.6	5.8	8.7	11.7	18.6	13.3	13.1	7.6	-2.2	-2.1
1907	-11.4	-1.7	0.7	3.3	7.8	11.2	16.0	14.6	11.4	8.9	1.6	-3.4
1908	-4.8	-4.1	-1.9	6.1	7.7	11.5	18.6	16.0	12.9	4.5	0.9	-5.3
1909	-8.0	-3.9	-0.6	0.7	7.6	14.3	17.4	17.7	12.2	7.1	1.2	-10.8
1910	-7.7	-9.9	5.8	8.6	9.9	15.1	19.1	15.6	10.5	8.1	0.8	-4.0
1911	-6.0	-8.1	2.8	3.7	8.5	14.9	16.1	15.0	9.7	3.9	-3.4	-6.3
1912	-5.5	-2.8	-7.3	4.6	8.7	14.8	15.5	14.8	8.0	3.3	2.3	-4.9
1913	-6.7	-10.0	-3.5	5.7	9.2	14.5	15.7	17.9	12.2	3.2	1.5	-6.0
1914	-2.1	-5.3	0.8	4.8	10.4	13.0	18.4	16.6	11.9	6.8	3.9	-8.0
1915	-6.4	-1.7	0.9	9.2	8.3	10.8	14.1	17.9	9.4	8.6	-0.9	-5.2
1916	-16.3	-3.9	2.3	4.9	6.2	11.8	17.9	16.1	11.4	3.6	-3.8	-8.9
1917	-8.6	-7.6	-6.1	1.9	8.3	12.8	20.5	17.4	13.8	6.1	4.3	-1.7
1918	-7.2	-7.2	1.3	2.6	8.3	17.3	17.1	15.8	11.8	8.6	-2.3	-3.0
1919	-2.1	-7.1	-0.8	6.7	10.7	17.8	21.0	19.0	12.7	0.3	-4.5	-10.2
1920	-4.2	-4.5	-4.1	1.2	8.4	13.1	18.4	17.1	12.5	4.8	-2.4	-3.7
1921	-3.7	-1.4	0.6	3.8	8.9	16.0	18.7	18.2	8.9	8.2	-1.4	-6.9
1922	-10.2	-11.6	-2.8	3.1	9.1	15.9	16.8	19.1	15.0	8.8	-3.0	-8.4
1923	-3.4	-8.1	-0.7	5.5	10.3	13.8	20.2	17.8	13.7	4.1	2.4	-6.2
1924	-7.8	-1.9	-3.5	3.2	11.1	13.2	17.9	17.2	12.3	7.1	-1.7	-10.1
1925	-3.2	0.7	0.9	6.6	11.6	13.7	19.6	17.3	11.4	1.2	-1.2	-1.5
1926	-4.8	-2.0	0.1	7.1	10.4	14.8	19.1	17.6	7.9	7.9	1.2	-6.7
1927	-6.8	-4.1	0.1	3.3	6.6	14.4	18.2	15.7	11.7	8.7	0.9	-10.8
1928	-5.6	-6.2	1.2	4.3	13.5	12.1	18.5	16.7	13.4	6.1	0.6	-5.8
1929	-12.3	-9.6	-0.4	3.4	9.2	14.2	19.1	20.4	10.0	7.3	-1.9	-2.3
1930	-16.6	0.3	-1.6	9.7	11.6	14.8	19.1	18.9	13.4	4.4	-0.4	-5.8
1931	-3.4	-3.7	-0.4	5.9	11.8	16.3	19.8	19.3	13.6	7.6	-3.0	-5.3
1932	-8.6	-4.1	-4.6	5.8	11.1	14.7	18.9	18.1	13.3	5.0	3.7	-9.8
1933	-4.9	-9.1	1.4	4.1	8.6	17.4	20.8	17.1	12.4	9.2	2.3	0.6
1934	0.4	-0.6	3.8	9.7	14.6	14.7	19.9	19.7	11.1	9.3	4.0	-3.9
1935	-4.9	-1.7	-2.1	2.9	8.5	13.8	19.2	18.2	14.5	7.0	-3.7	-4.7
1936	-6.1	-14.8	-0.1	6.0	13.9	16.2	22.2	19.2	13.3	7.8	-2.8	-3.2
1937	-18.2	-5.9	-2.7	3.6	11.7	13.8	19.4	18.3	14.4	9.6	1.4	-3.9
1938	-4.0	-3.3	0.1	5.1	8.8	15.0	18.1	17.7	16.8	7.3	-3.1	-2.3
1939	-2.3	-8.6	0.4	7.7	12.3	12.2	18.9	18.1	13.4	7.3	3.9	-0.2

1940	-10.2	-4.0	2.2	5.2	12.7	16.0	19.7	19.1	14.4	9.2	-4.1	-2.2
1941	-4.7	-3.2	2.4	5.6	11.7	14.7	18.7	18.2	9.6	6.0	1.6	-5.2
1942	-9.4	-9.2	-2.6	6.4	8.2	12.1	18.6	17.9	12.9	7.8	-0.6	-2.3
1943	-9.2	-2.8	-4.6	8.3	8.1	12.5	18.0	17.7	13.5	8.8	1.7	-4.6
1944	-5.4	-4.5	-2.4	6.9	11.4	12.4	17.1	16.6	13.3	10.2	-0.1	-6.0
1945	-3.6	-2.7	0.7	2.3	9.1	11.6	18.4	18.3	11.6	9.4	-0.8	-5.5
1946	-5.0	-3.1	2.1	8.7	8.3	14.2	19.4	17.7	12.7	3.9	-1.3	-1.5
1947	-6.1	-2.7	0.7	6.0	12.3	12.6	20.6	18.7	12.6	9.7	-2.8	-4.2
1948	-5.2	-5.6	-3.7	6.6	11.4	15.7	17.3	17.8	14.2	8.1	-1.2	-8.0
1949	-14.8	-6.3	-1.2	8.9	12.3	13.7	19.3	20.0	13.3	4.2	5.8	-4.2
1950	-10.4	-1.1	-1.3	4.8	8.4	13.5	16.9	16.7	-999.9	8.1	-0.2	-1.8
1951	-8.7	-4.2	-4.7	5.0	10.9	11.2	18.9	16.5	11.3	5.3	-0.8	-7.2
1952	-7.3	-4.5	-3.4	7.8	10.7	15.6	18.3	18.8	14.7	9.3	-2.3	-3.6
1953	0.9	-2.5	2.2	3.5	8.1	14.4	20.4	19.6	15.3	9.8	3.7	-1.9
1954	-6.2	1.5	-3.1	6.7	10.9	13.1	20.8	17.8	13.6	6.8	4.9	-3.9
1955	-6.9	-7.0	-5.6	2.9	10.2	13.8	18.5	20.6	13.0	8.7	-4.8	-5.3
1956	-6.1	-6.7	-0.8	5.0	11.1	16.8	19.5	16.9	14.9	7.9	-0.5	-1.8
1957	-12.6	-3.3	0.3	4.6	11.3	14.8	19.2	18.8	13.7	6.6	-1.2	-0.1
1958	-3.1	-0.8	-1.5	4.7	15.3	14.9	16.9	19.6	13.1	9.3	0.2	-2.1
1959	-3.4	-6.0	1.1	5.6	7.9	16.3	19.4	18.0	11.9	6.5	-1.9	-1.6
1960	-6.4	-6.2	-0.2	4.9	9.9	15.2	21.3	17.9	14.1	7.9	0.5	-3.9
1961	-2.9	1.8	2.5	4.4	11.1	18.7	20.8	20.8	9.3	5.8	-1.4	-5.4
1962	-9.1	-4.5	-1.5	7.7	10.0	15.4	17.8	17.4	12.8	9.1	2.0	-0.8
1963	-11.1	1.6	2.3	5.3	11.1	14.6	19.2	19.5	16.6	11.1	1.9	-5.1
1964	-4.3	-3.2	-2.7	4.4	10.6	13.8	21.0	17.1	12.1	9.2	-0.3	-3.6
1965	-1.6	-2.2	-4.7	6.1	8.6	14.3	18.6	17.1	6.9	10.2	2.7	-2.2
1966	-3.5	-3.4	0.9	4.7	12.7	13.9	20.7	17.9	15.6	7.3	0.9	-3.0
1967	-1.3	-0.3	-1.4	3.1	9.9	13.7	19.8	20.0	16.4	7.6	0.1	-7.5
1968	-6.2	-2.0	3.4	3.8	8.8	14.0	19.1	15.8	12.3	7.6	0.3	-6.3
1969	-9.1	-5.4	-2.8	8.1	12.4	13.4	18.7	19.9	15.1	3.4	2.4	-1.9
1970	-4.3	1.5	-1.4	2.0	11.1	16.8	20.0	20.6	10.8	5.6	0.9	-4.6
1971	-4.1	-1.3	0.2	5.1	11.2	14.4	18.4	21.6	11.3	6.0	0.9	-6.2
1972	-7.2	-0.6	5.0	5.2	10.4	16.6	17.6	19.7	11.4	5.7	0.4	-7.4
1973	-7.1	-4.2	1.1	3.8	10.8	15.4	19.9	19.5	12.3	8.7	-0.9	-1.4
1974	-5.9	0.0	0.3	7.7	9.1	17.9	21.1	17.3	13.2	9.3	1.7	-3.6
1975	-5.1	-5.9	-1.6	0.6	8.3	13.4	20.7	16.8	13.2	7.5	-0.8	-1.1

**Bozeman, Montana Monthly Precipitation Totals (mm)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1868	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	22.4	53.8	8.1	23.1	72.6
1869	29.2	31.8	73.7	79.5	150.1	67.3	21.6	0.0	13.7	10.2	3.3	16.0
1870	1.5	2.8	16.5	13.7	4.6	13.0	0.0	-999.9	-999.9	-999.9	-999.9	-999.9
1872	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	26.4	66.3	5.8	13.0	37.8
1873	9.7	7.6	25.9	20.3	47.2	149.9	-999.9	30.7	14.7	23.6	13.0	21.8
1874	9.4	19.8	38.9	13.7	156.5	65.5	12.4	69.3	40.1	26.4	11.4	26.4
1875	20.3	28.7	21.6	14.2	142.2	73.7	19.8	81.8	16.8	22.1	27.2	4.8
1876	1.8	6.9	28.7	25.1	180.3	60.5	5.3	58.9	13.7	21.3	21.1	27.2
1877	12.2	19.6	19.3	28.2	102.1	60.7	19.6	10.2	35.8	38.1	20.3	31.8
1878	22.9	23.1	25.7	35.6	153.2	84.8	16.0	22.1	70.6	46.5	2.0	43.7
1879	30.5	36.1	70.4	52.3	48.0	92.2	12.2	13.5	9.7	41.7	7.6	121.4
1880	22.1	46.2	55.9	107.7	181.1	203.5	29.5	8.6	7.1	52.1	33.5	18.8
1881	64.3	21.1	29.7	57.2	36.6	44.2	31.5	21.3	28.4	48.0	61.7	1.8
1882	26.2	25.7	63.5	66.5	74.7	77.0	29.5	8.4	56.1	33.0	17.5	21.8
1883	33.0	17.3	18.0	44.7	51.8	62.2	10.4	51.1	26.7	52.6	22.4	28.4
1884	31.8	19.1	20.8	33.3	75.7	88.9	63.0	27.9	118.1	35.1	0.0	45.7
1885	16.0	35.6	13.7	26.4	311.4	186.7	91.7	31.8	30.5	38.1	27.9	19.1
1886	22.4	29.5	42.7	96.0	36.8	71.9	30.0	25.7	-999.9	-999.9	-999.9	-999.9
1892	43.2	17.8	91.4	82.6	36.8	111.8	35.8	29.7	22.6	46.0	14.5	24.6
1893	9.9	9.4	15.2	21.8	80.3	31.2	13.0	-999.9	52.3	53.3	88.6	103.9
1894	55.9	50.8	172.7	78.0	64.5	120.1	54.9	13.5	54.9	29.2	0.0	15.2
1895	33.8	6.9	27.9	30.0	59.9	83.1	24.6	14.5	74.9	11.2	56.4	38.1
1896	12.7	17.8	26.7	36.8	127.8	64.8	29.2	9.7	91.4	14.0	43.2	10.2
1897	27.9	25.4	27.9	40.1	8.9	99.1	65.8	6.9	24.1	74.2	-999.9	-999.9
1898	15.2	12.4	41.1	27.2	116.8	80.8	21.3	11.9	23.6	-999.9	-999.9	-999.9
1900	2.8	40.6	22.6	82.3	63.8	9.9	33.5	17.3	31.5	41.4	34.3	13.2
1901	20.3	14.0	30.7	32.8	127.3	39.6	3.0	16.3	51.6	2.3	18.5	37.1
1902	10.4	16.8	19.6	30.7	99.1	66.0	22.1	28.7	52.6	36.3	28.2	18.5
1903	19.8	8.4	17.0	86.9	65.5	62.2	70.1	12.7	28.2	16.3	41.1	19.8
1904	21.6	57.2	75.7	34.5	51.3	44.2	28.2	21.8	1.5	14.2	9.4	51.6
1905	5.8	19.1	19.6	20.3	82.0	66.5	33.0	30.7	37.6	28.7	19.8	9.7
1906	18.8	19.1	23.4	40.9	59.4	86.1	11.9	45.7	35.1	34.3	43.2	10.9
1907	23.6	20.3	47.2	15.0	80.3	96.3	62.5	34.8	10.4	27.4	9.1	10.7
1908	13.2	32.3	35.6	34.5	242.3	116.1	8.1	27.7	43.7	50.0	29.2	9.1
1909	18.3	8.9	36.1	46.2	105.4	26.4	50.3	32.8	140.7	19.6	59.9	22.9
1910	20.8	20.8	15.7	47.2	69.1	34.3	18.5	37.1	89.2	69.6	43.2	10.4
1911	45.0	8.4	1.3	39.9	90.4	77.2	21.3	38.6	43.9	52.8	25.4	16.5
1912	23.4	9.9	47.2	91.2	67.6	68.3	48.5	41.4	42.2	82.0	9.4	18.8
1913	19.8	11.9	11.2	41.9	64.3	81.0	55.1	22.9	50.8	80.0	31.5	3.8
1914	18.5	14.2	16.3	51.3	52.1	89.7	32.5	2.8	84.6	48.8	3.0	4.3
1915	23.1	1.3	49.5	66.0	93.2	112.8	99.3	9.7	84.8	15.7	35.1	44.5
1916	24.1	19.8	51.8	53.3	75.9	59.2	40.1	35.1	48.0	61.0	28.2	41.7
1917	47.5	25.7	20.6	43.7	60.2	62.5	9.1	13.5	67.1	10.7	7.9	30.0
1918	50.3	20.6	31.5	34.3	71.6	68.6	43.7	20.1	61.7	26.7	43.4	7.4
1919	13.0	19.8	16.5	24.4	53.3	2.3	9.1	24.6	22.1	46.0	15.0	33.8
1920	8.1	13.0	51.3	61.2	84.6	90.9	30.7	26.7	21.1	43.4	27.2	30.7
1921	25.7	10.2	46.2	34.0	63.5	34.0	57.2	9.7	32.0	7.4	27.4	38.6
1922	15.2	18.3	20.3	42.4	72.4	72.6	63.2	40.6	24.1	23.6	37.3	20.3
1923	6.4	12.4	7.1	18.5	103.9	87.4	38.9	29.7	23.4	34.0	7.4	18.8
1924	46.2	37.1	43.4	71.6	48.3	37.1	49.5	5.1	73.4	46.2	60.2	13.7
1925	12.4	10.4	33.5	64.5	32.0	58.4	56.4	33.0	78.2	50.3	18.3	45.2
1926	12.2	35.6	14.2	8.9	122.4	40.4	23.9	50.3	79.8	26.2	41.9	47.8
1927	19.1	25.1	19.8	49.0	128.5	37.1	64.3	58.2	28.4	35.6	65.8	22.9
1928	38.4	26.4	33.0	31.2	29.5	96.5	20.6	40.9	12.2	38.9	13.7	29.7
1929	39.1	19.1	32.0	28.2	50.3	72.1	36.1	13.7	22.1	41.4	25.4	21.1
1930	8.9	10.2	19.1	32.5	18.3	21.6	41.7	54.1	26.7	86.6	24.6	15.7
1931	27.9	28.7	34.8	30.7	56.6	38.1	37.1	9.4	54.1	20.6	30.2	20.1
1932	25.9	7.9	57.2	65.0	17.5	83.6	39.4	39.1	5.3	56.6	28.7	14.2
1933	19.6	16.8	24.4	34.8	65.0	28.7	10.2	88.4	47.5	45.2	8.6	14.5
1934	11.9	18.0	33.8	4.8	22.4	59.7	10.2	1.8	26.9	37.3	8.1	32.8
1935	19.1	7.4	82.3	48.8	59.7	44.7	19.6	17.8	3.8	59.7	17.0	13.0
1936	30.2	31.8	17.0	23.6	33.3	54.1	2.3	37.6	26.4	18.8	16.8	32.8
1937	41.7	29.2	32.3	61.5	20.8	99.1	54.9	5.1	59.2	13.0	17.0	23.4
1938	9.7	11.2	82.0	39.4	143.0	46.2	30.5	22.4	2.3	78.7	48.0	3.6
1939	18.8	13.2	25.9	25.1	48.5	94.2	17.5	23.9	32.8	29.7	1.3	25.4
1940	37.6	31.0	32.5	84.6	35.1	75.9	15.5	11.4	63.0	26.7	31.8	28.2

1941	5.1	11.2	19.8	88.9	36.8	80.5	32.0	45.7	116.8	29.7	69.6	44.7
1942	54.6	43.4	37.6	20.1	62.0	68.1	11.9	13.5	39.1	31.0	45.2	11.4
1943	22.4	8.1	27.2	78.0	51.1	63.5	48.3	31.5	23.1	49.5	18.8	15.0
1944	3.0	18.5	24.4	15.2	76.2	202.7	43.2	36.1	54.1	24.6	18.5	15.0
1945	9.1	11.9	29.2	29.2	93.2	104.1	19.3	43.9	46.7	29.2	30.0	50.0
1946	32.0	28.7	59.9	36.3	77.0	35.1	37.3	19.3	50.0	59.7	21.6	15.0
1947	21.1	11.2	76.7	35.1	26.7	172.2	9.4	20.3	116.3	17.5	82.6	11.4
1948	28.2	16.5	22.6	51.8	60.2	123.7	40.1	48.5	15.2	13.2	38.9	36.3
1949	48.0	21.8	27.2	52.3	48.8	94.7	13.0	14.0	56.1	30.7	13.0	15.0
1950	18.8	19.1	50.8	25.1	52.6	54.9	69.6	47.2	50.5	22.1	27.9	23.4
1951	11.7	12.4	44.5	46.7	38.6	40.9	22.1	59.9	56.6	113.3	20.6	45.7
1952	31.5	30.2	40.4	50.5	168.4	51.3	32.5	29.5	14.2	5.3	32.8	10.4
1953	16.5	26.7	26.4	52.1	82.0	79.5	16.0	10.7	25.4	35.3	28.7	17.3
1954	27.9	3.3	30.2	11.2	43.2	94.0	16.8	33.5	30.7	22.4	1.8	7.1
1955	13.7	25.4	33.8	89.2	68.6	56.6	39.4	3.0	28.2	51.8	19.8	54.9
1956	19.8	4.1	32.3	42.2	52.3	26.9	11.7	24.1	24.6	28.4	13.2	7.4
1957	18.8	5.1	29.5	32.3	71.1	118.9	38.6	17.8	21.6	37.1	14.2	14.7
1958	20.8	22.4	38.6	48.5	9.4	61.7	82.6	64.0	35.6	10.4	42.9	23.1
1959	20.1	28.4	40.1	34.8	103.6	61.5	41.4	18.8	59.7	49.0	22.9	17.0
1960	19.8	18.0	45.0	58.9	59.2	30.0	9.4	54.4	10.9	22.4	25.9	17.3
1961	2.8	21.3	20.8	63.2	35.3	20.8	18.0	14.7	124.5	53.6	27.9	6.4
1962	32.3	12.4	33.5	28.4	98.0	39.4	78.2	54.4	16.3	29.2	76.5	8.6
1963	44.7	13.5	26.9	50.3	83.6	79.5	27.7	20.3	50.8	23.9	15.5	17.0
1964	12.2	17.0	30.2	53.8	79.0	94.5	23.1	96.5	2.0	32.8	39.9	23.1
1965	24.6	12.7	11.4	56.9	105.7	95.5	17.3	56.6	61.5	11.4	19.1	15.5
1966	19.1	5.6	30.0	27.9	64.5	72.1	11.7	32.0	27.4	38.9	24.9	17.5
1967	29.7	19.3	83.3	36.8	52.1	112.8	28.4	6.9	30.7	88.4	53.1	41.1
1968	23.1	11.2	54.1	36.1	102.4	96.0	27.4	66.8	70.4	34.8	67.3	8.9
1969	49.5	11.2	11.7	63.8	48.8	187.2	43.2	38.1	21.8	76.7	14.7	27.7
1970	17.8	8.1	56.1	39.4	86.9	37.6	80.0	24.6	56.6	40.1	35.8	15.7
1971	24.4	25.7	18.8	71.6	55.9	72.6	7.4	17.8	61.2	16.5	19.6	14.2
1972	21.8	16.8	31.5	48.5	43.9	78.0	30.5	36.6	50.8	65.8	16.0	12.4
1973	27.9	1.0	48.0	72.1	36.6	112.5	12.7	41.4	73.4	44.2	32.3	32.8
1974	10.7	10.9	43.4	47.5	76.2	24.4	12.2	67.3	37.1	40.6	17.0	25.9
1975	40.1	28.2	27.4	45.0	124.0	87.9	48.0	28.7	42.4	109.0	33.8	27.9
1976	15.2	13.2	26.2	85.1	49.5	101.6	41.7	20.1	83.6	45.0	5.1	5.6
1977	15.2	1.5	60.7	14.5	97.5	56.1	56.9	54.1	73.2	36.6	30.2	30.2
1978	26.2	22.1	18.8	23.6	102.6	53.6	55.1	20.8	107.2	20.6	47.5	18.3
1979	26.2	19.1	19.6	48.8	59.2	93.0	15.0	38.4	1.8	39.1	24.4	7.6
1980	29.7	32.8	42.4	9.9	144.3	72.4	28.4	47.0	86.4	18.5	19.6	7.9
1981	12.7	33.3	25.1	50.5	177.5	100.6	29.0	12.7	33.3	54.1	28.7	19.1
1982	26.9	19.8	71.1	55.9	73.2	102.6	38.6	25.7	74.2	34.0	13.2	34.3
1983	3.0	14.7	34.3	51.3	62.5	72.9	65.8	36.3	68.8	53.3	55.1	34.5
1984	11.4	34.0	52.8	59.9	58.4	78.2	43.2	46.2	48.0	41.7	32.0	17.3
1985	16.0	20.1	28.7	19.3	50.0	14.2	26.2	48.8	66.0	28.4	8.6	7.9
1986	23.1	40.9	37.6	60.7	43.2	71.9	39.6	50.3	38.6	11.9	46.2	3.0
1987	8.6	6.4	8.1	29.5	107.4	31.0	83.6	60.5	22.6	3.0	18.3	16.0
1988	16.3	9.9	34.8	56.6	127.5	30.0	4.3	13.2	38.6	19.8	31.0	14.5
1989	28.7	17.0	45.5	55.6	98.8	61.5	19.8	31.2	10.9	68.6	13.7	26.9
1990	25.4	7.4	49.3	62.2	76.7	30.0	17.3	34.0	8.1	35.1	41.4	23.1
1991	16.3	13.2	46.5	77.2	133.4	47.8	12.7	11.7	42.4	32.5	39.4	10.4
1992	11.7	9.7	24.1	80.0	70.6	139.4	43.7	22.9	54.6	56.6	26.9	20.3
1993	11.7	6.1	15.7	80.8	84.1	107.4	125.7	73.4	30.7	33.0	10.7	17.8
1994	9.4	14.0	21.3	49.0	36.8	88.9	71.6	15.5	9.1	74.2	43.4	18.0
1995	50.8	11.2	55.4	86.9	67.8	46.7	71.4	67.1	-999.9	55.6	30.7	15.0
1996	19.8	25.9	17.8	42.7	111.5	25.7	7.9	18.0	27.4	54.6	55.9	53.8
1997	49.5	18.5	35.1	59.2	108.0	114.0	63.2	51.6	66.3	42.7	20.8	20.6
1998	22.4	26.7	45.7	33.5	34.8	126.5	14.0	27.2	24.4	30.7	33.3	25.7
1999	21.3	19.1	35.6	54.9	64.0	64.8	2.5	87.1	16.0	7.9	6.6	18.8
2000	16.3	16.8	43.4	40.4	78.2	64.8	11.9	22.4	35.3	56.1	33.5	20.3
2001	12.4	10.4	18.3	25.1	18.5	126.5	21.8	1.0	15.0	43.9	4.8	17.5
2002	30.7	13.5	9.4	24.4	102.4	125.2	36.8	48.0	49.5	4.8	5.6	4.6
2003	37.3	62.0	42.7	91.2	66.5	71.9	9.1	10.2	3.8	27.9	18.5	50.0
2004	20.3	32.8	19.1	50.5	79.8	74.2	42.2	35.3	42.2	44.7	15.0	15.5
2005	21.3	15.0	32.8	64.0	43.4	112.0	35.1	50.0	32.8	75.4	67.8	26.2
2006	27.9	3.3	33.3	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9

**Indianapolis, Indiana Monthly Mean Temperature (C)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1871	-999.9	-999.9	8.6	14.2	19.9	24.4	24.6	25.0	17.6	14.1	3.7	-2.5
1872	-2.8	-1.3	1.2	14.4	18.2	23.7	26.3	25.3	20.1	12.3	1.9	-4.7
1873	-4.1	-1.0	3.3	11.7	18.4	26.0	25.1	24.4	18.1	10.6	2.7	2.6
1874	1.8	1.8	5.4	7.8	19.7	26.2	26.6	24.9	21.0	13.2	5.7	2.2
1875	-6.8	-6.1	2.8	9.8	16.8	21.9	24.4	21.0	17.3	10.9	4.6	4.9
1876	3.6	2.3	2.8	11.1	17.8	22.0	25.1	23.6	17.9	10.1	4.7	-6.1
1877	-3.1	3.8	1.3	11.6	15.7	21.6	23.7	22.4	18.9	14.6	5.4	7.4
1878	0.9	3.6	9.8	14.3	15.9	20.3	25.9	23.9	19.1	12.1	6.8	-3.4
1879	-3.9	-1.3	5.7	10.9	18.3	21.0	25.8	22.1	16.1	16.8	7.2	1.8
1880	7.2	3.4	5.1	12.6	19.9	22.7	24.1	24.2	18.3	11.9	-0.5	-4.3
1881	-4.8	-1.0	2.8	8.6	20.9	22.2	25.8	25.6	22.8	15.4	5.8	4.8
1882	-0.7	5.7	7.2	11.5	14.3	21.9	22.3	23.1	18.4	14.7	6.1	-1.1
1883	-4.7	-0.2	2.2	12.0	15.9	21.7	23.6	21.0	17.4	12.6	7.2	1.2
1884	-6.1	1.6	4.9	10.3	16.9	22.9	23.2	22.2	22.0	15.1	5.5	-1.2
1885	-5.3	-6.6	0.7	11.4	16.2	20.6	24.7	21.8	18.2	10.6	5.4	0.1
1886	-5.4	-2.1	4.1	12.7	18.0	20.7	23.6	23.3	19.7	13.3	4.2	-3.9
1887	-4.6	1.6	3.6	11.2	19.4	22.6	26.7	22.8	18.8	9.9	4.7	-0.9
1888	-4.3	-0.6	2.2	11.7	16.0	22.7	24.3	22.7	17.3	10.3	6.7	1.8
1889	1.2	-2.8	6.9	12.1	16.4	19.9	23.4	21.9	18.1	10.4	4.9	7.9
1890	3.0	3.8	2.3	12.1	16.4	24.8	24.2	21.7	17.2	12.8	8.1	0.7
1891	1.2	1.4	1.9	13.0	15.3	23.3	22.2	22.3	21.4	12.6	4.1	4.8
1892	-4.6	2.4	3.0	10.3	15.6	23.7	24.2	23.4	19.7	13.6	3.4	-1.1
1893	-7.8	-1.1	4.6	11.1	15.5	22.7	26.2	23.0	20.6	13.2	5.0	0.4
1894	1.4	-1.4	8.6	12.2	16.5	23.7	24.7	23.8	21.0	13.3	3.9	2.1
1895	-5.1	-5.7	3.8	12.9	17.7	24.2	23.4	24.6	21.6	9.7	5.7	1.2
1896	-1.1	0.2	2.2	15.6	21.6	22.4	24.4	23.7	17.9	11.2	7.0	2.3
1897	-3.9	0.3	6.1	10.4	14.4	21.1	25.0	22.4	21.9	16.2	6.4	-0.4
1898	1.0	0.1	8.0	10.2	17.5	23.1	24.9	23.7	21.2	11.9	4.2	-1.5
1899	-2.1	-5.6	2.6	12.8	17.9	23.2	24.2	24.7	18.7	15.6	8.0	-1.2
1900	0.6	-3.1	1.7	11.6	18.7	21.7	24.0	26.3	21.6	17.4	5.8	0.5
1901	-1.1	-4.4	4.3	9.6	15.7	23.1	27.8	24.0	19.7	13.7	4.0	-2.8
1902	-2.1	-5.2	6.1	10.2	18.9	20.8	24.3	22.0	18.0	14.1	10.1	-1.3
1903	-2.9	-0.6	8.4	11.3	18.9	19.1	24.4	22.3	19.4	13.0	3.4	-4.3
1904	-5.4	-3.9	4.9	8.0	16.5	20.7	22.9	21.9	19.4	12.3	6.2	-1.6
1905	-4.9	-6.7	7.8	11.0	17.3	22.0	23.2	23.7	19.9	12.2	5.3	0.8
1906	1.8	-1.7	-0.6	12.8	17.8	21.5	23.3	24.7	21.4	12.2	6.1	1.2
1907	1.2	-1.1	8.9	6.3	13.8	20.0	23.9	22.4	18.8	11.1	4.7	1.3
1908	-0.5	-1.4	7.1	11.2	17.7	21.5	24.4	23.7	22.0	13.2	6.9	1.4
1909	-0.5	1.9	3.9	10.4	15.4	22.3	22.3	23.8	17.9	10.3	10.6	-4.8
1910	-1.7	-2.9	11.1	11.6	14.2	20.8	24.1	22.7	20.0	14.8	3.1	-2.8
1911	0.7	2.4	4.9	10.3	20.3	23.6	24.4	23.4	21.1	12.7	2.7	2.6
1912	-8.2	-5.1	0.4	12.2	18.3	20.5	23.6	22.2	20.1	14.1	6.2	1.4
1913	1.7	-2.6	4.1	11.1	17.6	23.4	25.5	24.6	18.9	12.8	8.7	2.9
1914	1.4	-5.7	3.2	11.1	18.7	23.8	25.8	23.7	19.1	14.7	6.8	-3.4
1915	-2.9	2.8	1.9	14.4	15.4	20.8	22.8	19.7	20.1	14.2	7.5	-0.6
1916	1.0	-2.2	3.3	10.3	17.4	19.6	27.0	24.8	18.6	13.4	7.2	-1.4
1917	-0.8	-3.8	5.3	9.6	13.3	20.4	23.3	22.5	18.4	8.3	6.1	-5.1
1918	-9.7	-0.1	8.6	9.4	20.4	21.8	22.8	25.8	15.4	14.6	6.2	4.6
1919	1.1	0.7	5.9	11.2	15.2	24.3	25.9	23.0	21.3	15.8	5.3	-3.3
1920	-5.4	-1.6	5.7	8.2	16.1	21.7	23.0	22.2	20.8	16.4	5.3	0.7
1921	1.3	2.3	9.9	13.2	18.5	24.4	27.3	22.9	21.6	12.7	6.9	1.8
1922	-2.9	0.8	6.4	12.3	19.7	23.2	23.7	23.6	21.8	15.1	7.4	0.8
1923	1.4	-3.3	3.4	9.9	15.9	22.7	24.6	22.9	19.4	11.7	6.8	5.8
1924	-4.7	-0.8	2.0	11.9	13.3	21.3	22.7	23.0	16.5	16.1	5.9	-2.1
1925	-1.7	3.2	6.2	14.2	15.3	23.6	23.7	23.5	22.9	8.1	4.7	-1.9
1926	-1.9	1.4	1.3	7.6	17.9	20.1	24.6	24.3	19.9	12.9	4.0	-1.3
1927	-2.2	4.0	7.2	11.0	16.2	19.4	23.4	20.1	21.9	15.6	8.1	-0.7
1928	-1.7	0.1	4.0	8.8	16.3	18.6	24.3	23.7	17.2	14.7	6.3	1.9
1929	-3.9	-3.6	8.4	12.8	15.2	20.9	24.2	22.4	19.1	11.9	4.0	-0.2
1930	-4.0	5.3	3.9	12.8	17.8	22.0	25.6	24.1	20.7	12.0	6.7	-0.5
1931	0.8	3.3	2.5	11.5	15.2	23.9	26.5	23.7	22.7	15.2	10.9	5.1
1932	3.8	4.2	0.7	10.9	17.4	23.2	25.1	24.0	19.3	12.6	3.3	0.2
1933	4.0	-0.6	4.2	11.2	18.3	25.8	25.4	23.1	22.9	12.2	4.8	2.2
1934	1.1	-4.7	1.8	11.2	19.7	25.9	27.6	23.4	19.2	14.4	8.2	-1.0
1935	0.0	0.6	8.6	9.4	14.4	20.3	25.9	24.2	19.8	13.4	5.3	-3.4
1936	-5.4	-5.7	6.8	8.7	19.0	22.2	28.2	26.9	21.6	13.3	4.1	2.1



1937	0.7	-0.9	2.8	10.4	17.2	21.9	24.1	25.0	18.6	11.7	4.1	-1.4
1938	-1.4	3.2	8.6	12.2	16.9	21.3	25.0	25.0	20.4	15.2	7.6	1.3
1939	2.2	0.7	6.6	9.8	19.3	23.8	24.6	23.7	22.4	14.8	5.9	2.3
1940	-8.4	0.1	3.3	9.6	15.3	23.3	25.3	25.0	19.3	15.8	5.4	3.1
1941	-0.4	-2.2	2.4	15.0	19.4	23.3	25.6	24.6	22.1	15.8	7.6	3.7
1942	-1.6	-1.9	6.7	14.3	18.0	23.1	25.7	23.4	19.1	14.0	7.6	-2.1
1943	-1.2	1.3	3.1	9.3	17.3	25.1	25.6	24.7	17.9	13.1	4.6	-0.8
1944	1.4	1.6	3.4	10.6	20.9	24.7	25.6	24.5	20.2	13.6	6.9	-2.8
1945	-4.1	0.8	11.7	12.4	14.7	20.8	23.4	23.3	20.4	12.6	6.3	-3.2
1946	-0.4	1.4	11.8	12.6	15.9	22.4	24.4	21.3	20.1	16.4	8.6	3.1
1947	1.8	-4.4	1.4	11.2	15.8	21.0	22.5	27.2	20.2	18.0	4.0	0.9
1948	-5.1	0.3	6.1	13.3	16.7	23.0	24.8	24.2	20.6	11.6	8.3	2.1
1949	1.7	2.6	5.9	10.9	18.4	23.9	26.3	24.0	16.9	15.9	6.6	3.2
1950	3.5	0.4	3.2	8.6	18.3	21.3	23.3	22.2	18.6	16.1	3.2	-3.5
1951	-0.6	0.1	3.9	9.9	18.9	21.9	24.4	23.2	18.3	15.3	2.9	0.4
1952	1.3	2.6	5.1	12.2	17.0	25.7	26.1	23.6	19.9	11.1	7.3	2.4
1953	1.3	2.9	6.3	9.4	19.1	25.2	25.4	24.7	20.6	15.9	7.6	1.4
1954	0.0	5.2	3.9	14.8	15.3	25.0	26.4	23.9	22.3	15.2	7.2	1.2
1955	-1.2	0.7	5.5	15.6	19.0	20.8	27.6	25.8	21.3	13.8	4.8	-1.1
1956	-1.4	1.8	5.4	10.3	17.2	23.7	24.7	24.6	19.8	16.6	5.9	4.1
1957	-4.3	2.9	5.6	12.3	17.4	23.4	25.6	24.7	19.3	12.1	5.9	3.2
1958	-0.6	-2.8	3.5	11.8	17.6	20.8	24.6	24.6	19.9	13.9	7.6	-3.6
1959	-3.4	0.3	4.3	13.1	20.1	24.3	25.6	26.8	21.4	13.3	2.9	3.4
1960	0.3	-1.3	-2.3	14.4	16.5	22.0	24.4	25.2	23.0	14.3	6.9	-2.4
1961	-3.1	2.2	6.9	9.3	15.2	22.0	24.7	24.2	22.0	14.4	6.1	-0.6
1962	-3.6	-0.6	3.5	11.1	21.9	24.0	24.1	24.3	18.3	14.4	6.5	-1.8
1963	-6.2	-4.5	6.6	13.1	16.6	23.6	24.7	22.4	20.7	18.4	8.1	-6.0
1964	-0.7	-1.7	4.8	12.6	18.7	23.0	23.7	22.5	19.6	10.9	7.4	0.1
1965	-2.5	-1.4	0.9	12.4	20.2	22.1	22.7	21.7	19.7	12.1	7.1	3.7
1966	-5.3	-0.9	6.3	10.7	14.7	22.4	26.2	22.9	18.4	11.1	6.6	0.4
1967	0.3	-2.4	6.7	12.0	15.2	23.3	23.2	21.7	18.8	12.9	4.1	0.9
1968	-3.8	-3.1	6.0	12.1	14.8	22.4	24.1	23.6	18.8	12.4	6.1	-0.8
1969	-3.5	-0.2	2.1	12.2	17.4	21.0	24.3	22.6	18.4	12.1	3.1	-2.1
1970	-7.8	-1.9	3.4	12.8	18.7	21.9	24.0	23.4	20.6	12.9	4.9	1.5
1971	-4.8	-1.7	2.9	10.6	14.9	24.2	22.4	21.8	20.8	16.7	6.2	3.6
1972	-3.1	-2.0	4.3	11.2	18.3	20.4	23.7	22.8	20.2	10.8	4.4	-0.1
1973	-0.7	-0.3	9.7	10.7	15.3	22.9	24.4	23.6	21.1	15.2	8.0	-0.6
1974	-0.2	0.2	7.4	12.8	16.7	20.3	24.4	22.1	15.9	11.4	5.8	0.5
1975	0.0	0.0	2.7	9.4	18.6	21.9	23.1	24.5	17.0	13.3	8.0	0.4
1976	-4.5	3.8	8.1	11.9	14.9	21.8	23.3	21.8	17.6	9.3	1.5	-4.1
1977	-12.1	-2.1	8.1	13.9	21.4	21.8	25.6	23.3	20.9	12.3	7.7	-1.6
1978	-7.7	-7.9	2.6	12.9	17.5	23.3	25.1	23.9	21.3	11.5	7.6	1.3
1979	-7.8	-7.3	6.3	9.9	16.2	21.7	22.8	22.4	18.3	11.7	5.2	1.6
1980	-1.9	-5.3	2.2	9.5	17.8	20.6	25.8	24.8	19.9	10.5	4.6	-0.1

*Indianapolis, Indiana Monthly Precipitation Totals (mm)*

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1861	64.5	41.1	126.5	99.1	100.6	75.2	122.9	72.1	101.1	98.3	53.6	49.8
1862	99.3	38.9	150.9	192.3	159.0	79.8	191.0	100.6	83.3	125.7	68.1	145.8
1863	121.4	85.3	134.4	77.0	136.7	31.5	23.4	54.6	94.5	89.9	90.4	79.8
1864	58.4	30.2	70.4	111.3	144.5	45.2	10.9	61.0	81.0	48.0	110.2	86.9
1865	44.2	74.7	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9
1867	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	8.6	66.3	70.6	88.6
1868	56.9	28.7	180.1	125.5	209.8	53.1	114.0	59.7	134.9	29.5	45.2	41.1
1869	85.1	94.0	116.1	113.3	139.4	111.0	87.4	35.3	55.1	40.6	118.4	61.5
1870	94.7	27.4	83.8	49.3	14.2	72.1	-999.9	75.4	27.7	74.4	32.3	49.0
1871	35.6	59.7	101.6	47.5	40.4	63.8	127.0	93.7	22.6	39.1	89.4	60.7
1872	29.7	35.8	33.3	82.8	81.8	83.3	279.4	68.3	71.4	27.2	20.3	53.3
1873	114.3	72.4	99.1	150.1	98.8	94.0	286.5	33.5	44.7	133.9	64.8	149.9
1874	95.3	105.9	147.1	112.3	102.4	133.4	89.7	73.7	53.1	9.1	122.4	70.9
1875	25.7	47.8	132.8	32.8	128.3	310.1	333.2	93.0	34.0	67.8	77.2	101.9
1876	150.9	116.3	189.0	57.7	129.8	191.5	190.0	148.8	97.8	112.3	57.4	22.9
1877	39.9	30.7	132.8	81.5	53.1	157.7	106.4	104.9	51.8	81.8	92.5	62.2
1878	60.5	53.3	31.2	140.0	82.3	57.2	115.3	61.5	85.1	121.4	72.9	100.3
1879	37.3	55.1	85.3	57.2	85.9	74.7	61.0	145.0	176.3	34.0	147.8	129.5
1880	160.5	80.3	102.4	163.3	208.8	215.4	57.4	67.8	47.2	89.9	65.5	36.6
1881	53.3	163.3	101.9	66.0	96.0	99.6	20.8	24.6	82.6	155.2	237.5	137.2
1882	95.0	184.9	155.2	93.5	194.3	237.5	87.1	114.6	18.3	55.4	63.5	64.3
1883	33.5	182.6	82.6	69.3	102.1	116.6	155.4	63.0	69.1	217.4	172.7	110.2
1884	26.7	120.1	76.5	73.4	121.9	104.4	153.2	11.7	78.5	58.7	37.1	153.7
1885	84.1	39.1	20.8	134.1	93.0	145.8	36.3	147.8	88.9	82.6	68.8	62.2
1886	102.1	38.4	72.4	78.5	97.0	125.0	57.7	170.2	87.1	30.5	98.3	55.9
1887	37.6	117.1	70.6	99.6	60.7	62.2	35.8	80.0	53.6	14.0	94.2	114.8
1888	71.4	36.8	108.2	102.9	120.1	67.3	84.6	148.3	31.2	102.4	128.8	48.5
1889	64.0	32.8	54.6	52.6	146.3	124.0	151.9	13.7	96.3	43.2	126.2	70.1
1890	259.1	134.1	113.3	116.3	91.7	113.0	24.6	127.0	185.7	102.1	85.1	41.7
1891	50.8	151.6	146.6	58.4	40.9	73.7	49.0	147.1	18.8	30.0	129.0	75.2
1892	39.4	89.7	49.0	160.8	224.3	97.5	74.4	35.3	61.5	7.1	124.5	46.7
1893	70.4	156.5	68.3	218.4	80.0	76.7	21.1	15.5	77.0	76.5	82.6	56.6
1894	36.3	124.5	71.6	69.1	114.8	95.5	34.3	42.2	46.2	63.8	39.4	53.1
1895	79.2	21.8	33.0	49.8	27.2	37.8	72.9	48.5	189.5	21.1	147.6	123.4
1896	40.6	62.7	78.2	32.3	90.4	78.5	145.3	99.3	207.5	41.9	106.4	28.7
1897	94.2	60.2	148.6	122.7	111.0	94.0	144.8	10.7	20.1	11.4	174.5	78.5
1898	125.2	37.3	251.5	43.9	65.8	45.0	140.2	66.8	107.4	123.4	60.7	52.8
1899	89.4	52.8	106.2	34.5	85.9	44.7	92.5	147.8	64.5	63.8	84.1	70.4
1900	39.1	91.4	53.3	39.4	156.0	112.3	104.1	84.3	74.9	81.3	104.6	35.8
1901	40.4	41.4	104.4	81.0	62.2	89.4	21.1	90.7	16.8	89.4	29.7	103.9
1902	19.3	13.7	78.2	40.6	93.0	191.0	93.2	53.1	135.4	59.9	77.0	103.1
1903	60.7	95.0	54.1	94.5	94.7	81.0	64.5	99.6	30.0	93.2	42.4	14.7
1904	98.3	69.9	278.1	140.5	95.3	63.5	92.2	63.0	100.6	26.4	2.8	123.2
1905	36.3	47.0	78.7	68.6	138.9	92.5	58.2	69.6	54.1	107.7	37.6	55.9
1906	59.9	21.8	157.5	54.1	42.7	91.9	83.6	132.8	114.3	29.7	77.7	85.6
1907	195.1	4.6	103.4	52.6	72.4	118.9	112.0	59.2	58.7	56.6	64.0	82.0
1908	62.7	113.3	130.0	98.0	131.8	26.7	66.5	42.4	29.0	5.8	48.3	39.1
1909	70.1	118.1	60.2	106.2	152.7	132.3	137.7	71.1	54.6	82.0	83.8	73.7
1910	66.5	101.6	1.8	74.2	98.0	82.6	191.0	69.9	84.8	135.1	48.3	43.9
1911	75.7	32.5	73.4	121.2	23.1	55.9	59.7	29.5	118.6	102.4	89.9	64.5
1912	53.3	63.0	135.9	117.3	144.0	51.3	171.5	79.2	87.4	53.3	30.7	36.3
1913	193.8	47.0	197.1	76.5	37.8	59.7	98.6	126.5	77.0	69.3	157.5	12.4
1914	70.1	74.2	46.2	81.5	48.3	92.7	12.4	141.7	54.6	42.4	36.8	85.6
1915	84.1	25.7	37.3	25.1	100.1	73.9	201.7	133.4	105.9	43.7	77.5	130.8
1916	166.4	29.5	62.0	46.0	89.9	150.4	62.0	62.7	57.4	37.3	43.9	63.5
1917	86.4	29.2	120.7	108.0	85.3	133.1	81.3	37.6	74.4	100.6	3.0	27.9
1918	73.4	63.2	40.1	136.1	97.8	79.0	62.0	56.9	130.6	69.9	43.9	157.2
1919	23.1	30.7	170.7	85.1	84.8	84.6	24.6	87.1	47.2	228.1	83.1	21.6
1920	51.1	34.3	67.6	184.4	128.0	96.0	114.6	47.0	60.2	49.8	53.8	83.1
1921	72.6	32.5	184.2	94.7	39.4	81.8	36.1	184.4	191.5	43.2	226.3	83.1
1922	32.0	37.1	181.9	217.2	65.5	25.1	67.8	62.2	38.6	45.2	58.9	113.0
1923	69.3	43.2	112.0	49.3	148.8	58.4	61.7	122.7	99.3	83.6	51.8	142.2
1924	79.5	36.6	119.9	83.3	113.5	102.6	44.5	121.2	71.1	20.1	44.5	140.5
1925	12.4	41.7	72.9	50.3	23.9	119.4	118.6	97.0	151.4	105.7	130.3	27.7
1926	69.1	69.9	79.2	99.3	91.2	32.5	96.0	126.2	237.0	68.1	42.4	49.5
1927	80.0	59.9	160.5	131.1	142.7	31.5	88.4	67.1	68.6	51.1	119.1	75.9

1928	44.2	87.4	62.0	70.1	77.2	222.8	78.0	96.8	23.4	74.4	93.0	55.6
1929	120.4	37.3	82.3	108.7	214.9	136.1	138.2	63.2	51.6	93.0	54.6	105.2
1930	186.4	70.1	45.7	102.9	42.9	39.4	22.9	52.8	72.6	45.0	52.3	20.3
1931	13.7	44.7	58.9	90.9	63.8	55.9	74.9	119.4	93.0	95.3	85.9	112.0
1932	154.9	37.3	49.8	70.4	15.2	150.9	72.6	80.5	182.4	82.6	68.3	119.4
1933	51.3	48.3	157.5	105.7	180.3	63.5	148.6	50.0	133.9	32.5	29.5	55.1
1934	31.8	21.8	84.3	56.6	15.2	75.7	63.5	63.2	115.3	4.8	54.4	47.5
1935	59.2	5.1	88.6	39.1	177.0	118.4	80.3	126.7	101.1	25.7	90.4	46.7
1936	33.5	81.5	54.1	98.8	37.6	73.9	17.0	63.2	109.2	83.6	116.3	81.3
1937	204.5	42.7	37.3	108.5	40.1	93.7	136.4	87.9	83.3	142.0	49.3	95.8
1938	25.4	64.0	201.4	82.3	130.6	164.8	181.6	64.3	44.2	26.9	77.0	37.1
1939	135.4	75.4	77.0	145.8	22.4	144.0	182.9	73.9	29.7	74.4	29.2	28.7
1940	35.1	60.5	22.9	153.7	109.2	47.8	22.9	73.9	26.9	29.2	84.6	65.5
1941	42.7	16.8	28.4	48.5	28.4	178.6	30.7	35.6	49.3	182.6	56.4	40.1
1942	30.5	96.0	110.5	71.6	141.5	194.3	73.9	75.7	87.9	28.2	116.8	43.2
1943	25.1	33.5	89.7	48.0	249.9	82.3	70.1	37.8	95.0	39.9	52.6	24.9
1944	5.1	68.3	117.1	185.9	87.6	52.8	33.5	126.2	61.2	15.7	62.2	33.5
1945	20.1	63.5	193.8	121.4	98.8	206.2	154.2	108.0	145.3	47.5	82.6	69.3
1946	31.5	59.4	96.3	30.0	192.8	102.4	54.6	54.6	23.9	45.5	79.2	86.4
1947	99.8	7.9	51.6	141.5	106.2	121.2	55.6	132.6	63.2	58.9	32.8	38.4
1948	55.6	49.0	152.7	82.6	79.8	129.5	121.2	29.0	107.2	61.5	123.7	77.2
1949	181.1	61.2	85.6	47.2	71.1	104.4	98.6	201.7	72.6	98.3	24.1	89.4
1950	313.7	133.1	85.3	77.2	69.3	177.5	48.5	110.5	149.4	25.4	135.9	63.2
1951	66.3	86.1	69.6	80.8	72.9	144.0	71.6	54.4	54.6	80.8	152.7	115.3
1952	93.0	58.7	120.4	82.6	81.5	222.8	61.7	62.0	135.6	11.4	77.0	58.7
1953	54.9	37.3	115.8	65.5	138.9	100.8	124.7	62.5	32.0	31.8	44.5	53.1
1954	72.1	62.0	70.6	64.8	46.5	61.7	64.5	98.3	21.8	111.5	43.2	54.6
1955	51.8	53.1	87.9	92.7	99.6	73.7	117.9	52.6	157.2	109.7	154.2	16.5
1956	37.1	67.6	43.7	113.8	217.2	220.0	112.8	71.6	29.5	29.0	55.1	116.8
1957	80.5	46.5	68.1	199.4	183.4	180.1	103.6	94.0	61.5	81.0	86.9	182.1
1958	35.1	9.4	35.3	61.0	103.6	193.3	271.3	146.8	83.1	79.2	122.7	3.0
1959	131.6	71.4	69.3	105.4	96.3	53.1	135.1	54.4	59.7	132.3	64.0	87.4
1960	60.7	122.4	34.0	49.0	134.9	180.6	114.6	79.8	52.1	33.3	43.2	55.9
1961	25.9	67.3	169.9	165.4	132.8	75.7	65.3	63.5	84.1	50.3	77.2	58.4
1962	97.8	60.2	89.9	24.6	191.5	19.3	239.5	113.8	64.3	125.0	35.8	25.9
1963	25.7	18.5	229.4	119.9	48.0	78.7	110.0	54.9	6.4	1.0	61.5	25.1
1964	51.8	51.1	182.9	205.5	36.1	69.3	103.9	17.3	32.3	16.3	79.5	77.5
1965	98.0	110.0	55.1	147.3	36.6	88.6	80.8	82.6	131.1	26.7	35.8	75.4
1966	28.7	73.9	33.3	84.3	37.3	32.5	68.8	33.3	145.5	40.6	119.9	132.8
1967	46.0	46.7	84.6	76.2	127.0	27.2	59.4	60.5	20.3	145.3	64.5	125.0
1968	75.2	38.4	94.7	72.6	235.0	63.8	55.6	113.0	39.1	28.7	120.4	106.2
1969	157.2	31.2	33.8	112.3	46.2	105.7	203.7	75.7	73.4	122.7	72.6	51.8
1970	29.7	47.2	63.8	165.9	61.7	50.0	112.5	46.2	61.2	93.0	53.8	52.6
1971	50.3	135.9	37.8	29.5	108.0	86.1	144.3	49.0	78.7	46.7	32.8	152.9
1972	39.9	29.2	63.0	147.6	48.0	153.4	51.1	74.7	143.5	57.2	143.5	71.9
1973	57.7	28.2	143.0	70.1	45.5	150.1	169.4	69.6	61.7	79.0	91.9	108.5
1974	86.1	65.5	91.4	87.6	159.3	130.8	30.5	143.0	82.5	25.1	75.9	71.4
1975	111.0	104.9	105.7	105.2	61.5	145.5	117.6	118.9	58.9	71.1	92.2	94.2
1976	58.2	73.7	87.9	24.9	78.7	100.8	78.5	201.9	51.3	70.9	20.8	11.4
1977	38.1	91.9	97.3	48.5	70.6	98.0	65.3	113.5	86.4	70.9	76.5	109.5
1978	96.5	9.1	89.9	91.2	106.9	112.5	128.0	175.0	21.6	97.0	60.5	102.4
1979	82.3	72.6	61.7	79.8	56.6	99.8	280.9	154.7	9.1	58.9	111.0	65.3
1980	42.4	46.7	108.2	53.3	57.4	105.4	72.9	211.8	84.1	47.5	35.8	19.8
1981	9.1	73.2	31.0	147.6	234.4	41.7	146.1	42.9	51.8	59.7	28.4	86.4
1982	143.3	41.1	120.1	61.0	150.9	131.1	87.4	25.4	30.5	23.1	105.7	146.8
1983	26.7	26.2	74.7	113.5	118.9	115.1	40.1	70.9	32.5	98.3	115.6	87.1
1984	24.6	80.3	79.8	99.1	110.5	38.4	122.7	83.1	119.1	66.0	136.7	110.0
1985	34.8	94.7	150.9	66.0	116.8	77.7	103.1	134.4	68.8	46.2	215.9	83.8
1986	18.5	72.1	99.8	110.2	187.2	90.9	124.0	30.0	144.3	199.1	58.9	43.4
1987	39.4	32.5	46.7	68.1	45.0	104.4	234.2	21.8	35.8	34.5	66.0	121.2
1988	59.7	77.2	81.8	102.1	26.9	9.1	119.6	37.1	29.0	78.0	111.5	63.5
1989	44.5	33.5	94.5	109.7	147.1	96.5	156.2	204.5	204.7	74.2	70.9	48.3
1990	46.0	127.0	51.0	62.0	193.0	79.0	94.0	113.0	68.0	118.0	82.0	196.0
1991	40.0	49.0	163.0	110.0	118.0	23.0	55.0	90.0	28.0	139.0	100.0	37.0
1992	36.0	29.0	66.0	106.0	40.0	103.0	300.0	36.0	86.0	72.0	200.0	48.0
1993	84.0	59.0	95.0	95.0	70.0	131.0	126.0	163.0	145.0	57.0	211.0	55.0
1994	68.0	35.0	23.0	143.0	52.0	178.0	32.0	66.0	56.0	22.0	86.0	42.0
1996	98.0	30.0	89.0	177.0	197.0	133.0	107.0	53.0	192.0	47.0	155.0	59.0
1997	101.0	87.0	117.0	50.0	126.0	81.0	14.0	77.0	38.0	39.0	49.0	34.0

1998	-999.9	31.0	139.0	123.0	156.0	261.0	101.0	93.0	73.0	124.0	64.0	25.0
1999	161.3	90.7	43.4	103.9	95.3	65.3	75.2	38.1	19.1	46.2	17.5	66.3
2000	52.6	72.6	41.7	96.5	127.0	115.6	74.9	108.2	122.4	78.2	67.8	70.1
2001	18.8	49.5	16.3	46.2	104.1	113.3	211.8	62.7	118.4	178.1	68.3	76.5
2002	63.0	42.4	107.2	138.9	189.5	79.0	41.9	36.1	94.0	67.1	73.0	77.0
2003	32.3	87.6	94.5	64.8	162.3	59.9	203.5	117.9	263.4	68.1	92.5	88.4
2004	118.1	19.6	110.0	39.1	217.2	112.8	196.1	120.0	19.0	110.0	131.0	50.0
2005	239.0	66.0	29.0	119.0	64.0	91.0	76.0	107.0	119.0	42.0	93.0	68.0
2006	84.0	48.0	173.0	92.0	110.0	143.0	101.0	77.0	90.0	138.0	108.0	133.0
2007	112.0	72.0	125.0	84.0	50.0	56.0	48.0	87.0	40.0	71.0	-999.9	-999.9

**Miami, Florida Monthly Mean Temperature (C)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1895	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	27.9	26.0	24.6	19.2
1896	17.5	18.8	20.9	23.6	26.4	27.8	28.3	28.0	27.6	25.6	25.2	20.3
1897	18.6	21.2	23.4	23.4	24.9	27.7	27.6	28.7	26.5	23.5	23.6	21.3
1898	18.7	19.0	22.3	23.2	24.3	27.2	27.8	27.6	27.7	24.8	24.2	19.7
1899	21.0	20.5	22.6	22.4	26.0	27.3	27.6	28.2	27.1	25.7	22.9	20.2
1900	17.8	19.1	21.7	23.4	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	21.8
1901	17.0	18.7	20.7	21.2	23.9	26.9	27.7	27.3	27.3	25.8	19.7	19.6
1902	17.6	17.4	21.4	23.6	26.8	27.9	28.3	28.6	27.9	27.0	23.9	21.0
1903	20.6	22.9	24.0	22.7	24.9	26.8	28.0	28.8	27.1	24.8	22.0	19.0
1904	19.8	21.5	24.1	23.1	25.6	26.4	27.3	27.2	27.3	26.2	21.3	20.1
1905	17.8	22.0	23.1	23.8	27.2	26.9	27.6	28.1	27.8	26.1	23.6	20.9
1906	19.7	20.1	21.6	23.3	25.6	27.0	27.6	27.3	27.3	25.0	22.4	19.7
1907	21.2	19.2	22.5	23.0	26.6	26.4	27.8	28.1	27.8	25.1	23.3	20.5
1908	19.1	18.5	23.7	26.1	26.2	26.3	28.1	27.8	27.7	24.6	22.8	22.0
1909	20.9	20.9	23.0	24.8	26.3	27.6	27.7	28.1	27.3	25.2	22.8	19.4
1910	19.6	20.4	21.3	22.6	25.8	26.7	27.6	27.9	27.4	25.1	20.4	17.4
1911	21.0	21.2	22.5	24.1	24.7	27.3	27.6	27.9	27.8	27.0	24.3	22.1
1912	20.0	17.1	23.5	25.4	26.2	26.9	27.8	28.4	28.0	26.4	21.9	22.6
1913	22.4	21.6	24.1	22.0	24.4	26.0	27.4	27.6	26.8	24.0	21.9	19.9
1914	18.0	19.7	18.6	23.7	25.3	27.3	27.3	27.6	26.0	24.4	21.4	20.8
1915	19.4	18.7	17.2	20.8	25.6	26.3	27.7	28.1	27.2	26.1	22.9	18.7
1916	22.2	18.7	18.8	21.2	24.8	26.3	27.1	27.0	26.4	25.1	22.2	20.6
1917	21.0	18.2	22.4	22.2	24.2	26.2	27.2	27.4	26.2	25.2	19.4	17.6
1918	17.1	21.3	22.4	23.1	24.6	26.3	26.9	27.5	26.4	26.1	22.3	19.9
1919	18.4	19.2	22.1	22.6	24.7	26.1	27.1	28.1	26.9	26.7	23.0	20.4
1920	20.3	17.9	19.8	23.9	24.6	26.2	27.3	26.7	26.9	24.0	22.3	20.0
1921	19.9	20.4	23.2	23.3	23.7	26.5	27.3	27.3	27.2	25.1	23.1	20.9
1922	19.8	21.3	22.7	24.3	25.1	26.4	27.0	27.3	26.7	25.6	22.8	22.1
1923	20.4	21.0	23.2	23.8	24.4	26.6	27.1	27.6	26.7	24.3	20.2	21.4
1924	20.8	17.8	19.3	23.7	25.4	27.3	27.8	28.3	27.1	24.9	22.0	22.3
1925	22.8	20.5	21.1	22.3	24.4	26.7	28.1	27.8	27.9	26.7	22.4	20.2
1926	19.8	19.4	20.2	23.8	24.9	27.2	27.6	28.0	28.2	26.3	22.3	22.3
1927	18.8	22.5	21.2	23.6	25.8	27.9	27.8	28.2	26.7	25.0	22.8	19.7
1928	17.8	20.8	21.7	23.1	23.4	26.4	27.5	27.6	26.9	25.7	22.1	19.6
1929	21.3	22.0	22.7	24.3	25.7	26.3	26.7	27.7	27.2	24.0	24.4	20.3
1930	21.9	21.4	20.6	23.3	25.9	26.2	28.1	28.0	27.9	24.9	21.4	18.0
1931	17.7	18.6	18.4	21.8	25.0	26.9	28.2	28.3	27.3	25.7	23.0	24.1
1932	22.0	22.8	20.4	22.6	24.4	27.4	28.8	27.8	27.7	26.1	20.9	22.6
1933	21.2	22.6	21.6	24.2	26.6	26.9	27.5	28.1	27.9	25.5	21.5	21.6
1934	20.8	19.7	21.5	23.3	25.4	26.9	27.9	27.8	27.2	26.5	22.6	20.3
1935	19.3	19.2	22.7	24.0	26.8	26.9	27.6	28.3	27.1	25.6	22.2	16.7
1936	20.4	20.1	21.3	23.6	25.0	26.1	27.9	27.8	27.7	26.8	22.2	22.0
1937	24.1	20.8	21.3	23.4	25.2	27.3	27.7	27.8	27.1	25.0	21.7	19.4
1938	19.6	21.2	23.5	23.5	25.7	26.4	27.2	28.4	27.4	24.3	23.5	20.2
1939	20.4	22.9	23.3	24.2	25.2	27.1	27.8	27.7	27.6	26.4	21.6	19.9
1940	16.3	18.0	20.7	22.3	24.5	27.3	28.6	28.2	26.7	24.4	22.7	22.8
1941	19.3	18.2	19.7	23.6	24.6	27.6	27.9	29.2	27.7	27.0	23.7	22.9
1942	19.2	17.3	21.3	22.7	25.7	27.3	29.2	28.5	28.0	25.6	23.2	21.7
1943	21.1	18.0	21.2	22.0	24.8	26.4	26.9	27.3	26.8	24.0	21.5	19.4
1944	18.3	21.6	22.6	23.9	23.9	27.2	27.6	27.8	27.3	23.9	21.2	18.3
1945	18.7	20.7	22.9	24.4	24.3	26.6	26.9	27.2	26.4	24.8	21.0	19.6
1946	20.2	20.6	21.8	22.9	25.4	26.1	26.9	27.6	26.6	25.0	23.9	22.1
1947	22.6	16.8	19.5	24.7	25.1	26.4	26.6	27.2	26.6	25.2	24.5	21.4
1948	19.3	21.7	24.6	24.3	25.4	27.4	28.3	28.0	27.4	25.1	24.9	22.7
1949	21.3	23.1	21.6	24.3	25.3	26.8	27.9	27.8	27.6	26.1	20.4	22.1
1950	22.8	21.1	22.0	21.3	25.7	27.6	27.4	27.6	27.2	26.1	20.6	18.4
1951	18.4	18.4	21.4	23.1	25.4	27.2	27.7	28.7	28.4	25.6	21.7	22.5
1952	20.7	20.0	23.6	22.8	26.1	28.3	28.6	28.5	28.3	25.7	22.9	19.2
1953	19.8	21.8	23.7	24.3	26.9	27.4	28.1	28.6	27.8	24.4	22.4	20.8
1954	20.6	19.9	20.8	24.8	26.2	27.3	28.3	29.4	28.0	25.1	21.6	17.9
1955	18.3	19.8	21.9	24.2	25.6	26.8	27.2	28.4	27.8	25.1	22.6	20.8
1956	17.1	21.7	21.3	23.3	26.3	27.1	28.2	28.8	27.1	25.7	21.0	20.8
1957	21.2	22.6	21.4	24.6	25.8	27.3	27.6	27.6	27.4	24.7	23.9	18.7
1958	16.3	15.2	21.1	23.6	25.2	27.6	28.1	28.6	28.0	25.1	24.8	20.6
1959	19.1	23.8	21.8	23.9	25.4	26.8	27.1	27.2	27.0	26.9	23.2	19.5
1960	19.3	19.7	19.8	23.6	25.0	27.3	28.7	28.5	27.6	26.4	23.7	18.6

1961	18.3	20.9	23.2	23.4	25.6	27.3	28.6	28.6	27.8	25.4	23.1	20.5
1962	20.1	21.9	21.2	22.8	25.0	26.7	28.5	28.3	27.3	25.3	20.1	17.6
1963	19.5	18.8	23.0	23.7	25.0	27.0	28.4	28.3	27.4	24.6	21.8	17.5
1964	19.7	18.7	23.7	25.1	25.3	27.3	28.2	28.7	27.9	24.9	23.8	22.3
1965	19.4	21.6	22.8	24.8	25.8	27.1	27.4	27.6	26.6	25.6	23.4	20.7
1966	18.9	20.5	20.7	22.7	25.3	25.7	27.3	27.6	27.3	25.5	21.2	19.2
1967	21.9	20.5	22.7	23.7	26.3	26.6	28.0	27.7	27.4	24.6	21.8	21.3
1968	18.9	17.1	19.4	24.4	25.3	26.4	27.6	28.8	27.9	25.4	21.7	19.2
1969	19.8	18.4	19.9	25.2	26.4	27.9	28.9	28.6	28.1	26.8	21.3	18.8
1970	17.7	18.2	22.1	26.1	26.2	27.8	28.2	28.9	27.9	26.4	20.9	21.6
1971	20.1	21.6	21.3	23.9	26.2	27.2	28.2	27.7	27.1	26.1	23.3	23.4
1972	22.8	20.2	22.3	23.9	25.3	26.6	27.2	27.6	26.9	25.5	22.9	21.6
1973	21.3	18.5	23.6	24.2	26.4	27.4	27.7	27.4	27.7	25.3	24.6	19.4
1974	23.5	20.5	24.2	24.6	26.7	27.8	28.1	28.9	28.9	25.6	22.7	20.6
1975	22.6	22.8	23.0	25.3	26.3	27.5	27.3	28.1	27.8	26.2	22.4	20.6
1976	18.2	20.4	24.3	23.9	25.8	26.2	28.4	27.7	26.9	24.6	21.9	20.1
1977	16.2	18.9	23.8	23.8	25.0	27.6	28.7	28.4	28.3	24.7	23.3	20.6
1978	17.8	17.3	20.5	23.3	26.2	27.7	28.1	28.1	27.8	26.0	24.3	22.8
1979	18.3	18.3	20.7	25.4	27.0	27.7	28.4	27.8	27.1	25.5	24.1	21.2
1980	19.7	17.8	22.9	24.1	26.1	27.4	28.1	28.2	27.8	26.7	23.5	19.6
1981	15.4	20.8	21.2	25.4	26.5	28.7	29.5	28.4	27.3	26.5	21.9	19.9
1982	19.9	23.6	23.7	25.5	25.1	27.8	29.1	28.9	28.2	25.5	23.9	22.6
1983	19.6	19.7	19.8	22.1	25.7	27.7	29.5	28.5	27.5	25.7	22.5	21.0
1984	19.4	20.3	21.3	22.9	25.0	26.6	27.8	28.1	26.7	25.7	22.0	21.7
1985	16.7	20.2	22.5	23.4	26.2	28.0	27.3	28.0	27.0	26.9	24.2	18.9
1986	18.5	20.8	20.4	22.0	25.3	27.4	28.4	28.6	28.5	26.9	26.3	23.1
1987	18.9	21.6	22.2	21.5	25.9	28.9	29.0	29.7	28.7	25.4	24.1	21.1
1988	19.9	19.8	21.5	24.5	25.5	27.8	28.4	28.7	28.9	26.2	25.0	21.4
1989	22.6	21.6	23.2	25.1	27.2	28.2	28.5	29.1	28.9	26.1	24.6	18.3
1990	23.1	23.3	23.2	24.0	26.8	28.3	28.6	28.7	28.4	26.9	23.5	22.7
1991	22.7	21.0	23.3	25.8	27.5	28.3	28.6	29.2	28.0	26.1	22.9	22.4
1992	19.7	21.4	22.2	23.4	25.5	27.5	29.4	29.1	28.5	26.4	24.9	22.0
1993	22.9	20.5	22.0	23.4	26.2	28.5	29.2	29.3	28.3	27.1	24.4	20.5
1994	20.8	22.9	23.3	25.7	27.2	28.7	28.9	28.4	27.5	27.0	25.3	22.2
1995	19.5	20.0	23.1	25.0	27.8	27.8	29.2	29.2	28.6	27.5	23.1	20.0
1996	20.0	19.5	21.2	24.5	27.5	27.8	28.9	28.3	28.6	25.9	23.4	21.2
1997	20.0	23.6	24.7	24.5	27.0	27.8	28.9	28.9	27.5	25.8	23.6	20.6
1998	21.1	20.6	20.9	24.5	27.0	29.5	29.5	29.2	28.7	27.0	24.5	23.1
1999	21.1	20.9	21.4	25.6	26.2	27.3	28.9	28.6	27.8	26.4	23.6	21.1
2000	20.3	20.9	23.9	23.9	27.0	27.8	28.9	28.6	28.4	25.6	23.1	20.6
2001	17.3	23.6	23.1	24.5	25.3	28.3	28.1	28.9	27.5	26.4	23.4	22.8
2002	20.9	21.1	23.9	25.8	27.3	26.7	28.4	28.9	28.4	27.8	23.2	21.4
2003	17.5	22.8	25.9	24.5	27.5	27.8	29.2	28.4	27.8	27.3	24.5	19.5
2004	19.2	21.7	22.8	23.4	26.7	28.9	28.9	28.8	28.1	26.3	23.9	20.3
2005	20.0	20.3	21.8	23.0	26.2	27.3	29.5	29.6	28.4	26.3	24.1	20.7
2006	20.8	19.7	22.2	25.1	26.3	28.2	28.3	28.8	28.2	26.7	22.7	23.5
2007	22.5	20.6	23.2	23.8	25.9	27.5	28.8	29.4	28.4	27.5	-999.9	-999.9

**Miami, Florida Monthly Precipitation Totals (mm)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1855	226.6	5.1	99.1	76.2	373.1	81.3	287.5	119.4	144.8	200.7	73.7	45.7
1856	203.2	38.1	124.5	50.8	119.4	170.2	121.9	30.5	213.4	256.5	12.7	0.0
1857	5.1	38.1	139.7	99.1	81.3	157.5	304.8	166.6	158.2	146.8	96.3	117.1
1858	174.5	83.8	131.6	21.6	33.3	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9
1872	53.3	80.0	48.3	71.1	48.3	261.6	124.5	94.0	327.7	264.2	30.0	121.9
1873	165.1	80.0	88.9	94.0	121.9	203.2	144.8	53.3	121.9	104.1	30.0	40.6
1874	75.2	80.0	104.1	15.5	191.8	134.6	363.2	241.3	429.3	337.8	73.7	195.1
1875	75.2	80.0	10.2	129.5	223.5	83.8	195.6	144.8	132.1	124.5	15.2	10.2
1876	53.3	53.3	53.3	38.1	218.4	124.5	152.4	160.0	378.5	388.6	48.3	88.9
1877	35.6	147.3	104.1	71.4	375.9	99.1	345.4	322.6	314.7	177.8	30.0	119.4
1878	116.8	73.7	121.9	106.7	193.0	363.2	238.8	238.8	637.5	154.9	10.2	6.9
1879	5.1	45.7	71.1	45.7	63.5	162.6	233.7	367.8	175.3	391.2	2.5	88.9
1880	96.5	-999.9	20.3	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9
1895	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	88.9	528.8	76.2	23.4
1896	11.4	95.3	54.4	2.5	58.9	344.2	85.1	162.6	163.8	31.8	25.4	45.7
1897	119.4	48.3	19.1	268.0	182.9	134.6	152.4	55.9	516.9	186.7	29.2	25.4
1898	0.0	62.2	66.0	15.2	41.9	17.8	150.4	237.5	103.4	372.1	10.2	38.1
1899	83.8	70.4	41.9	273.1	35.6	88.9	95.3	127.0	245.4	259.1	44.5	62.2
1900	133.4	47.0	132.1	163.8	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9	-999.9
1901	-999.9	0.0	42.4	50.0	264.7	551.7	207.8	275.6	388.6	125.0	-999.9	39.4
1902	0.0	150.1	0.0	47.0	23.9	152.7	83.3	135.4	198.4	105.9	180.8	47.2
1903	126.7	119.4	122.4	-999.9	34.3	266.2	-999.9	-999.9	318.5	113.8	94.0	0.0
1904	43.2	41.9	78.7	51.8	311.9	156.5	74.7	232.4	222.5	256.0	132.3	10.2
1905	67.3	16.3	42.9	33.5	99.8	193.3	92.2	348.2	304.5	-999.9	92.7	306.8
1906	81.3	96.0	111.3	59.2	200.4	218.4	235.2	227.1	60.7	347.5	192.0	0.0
1907	37.6	4.1	18.3	18.5	86.6	215.1	96.0	91.4	95.5	70.4	78.2	30.2
1908	87.9	24.6	42.2	66.8	216.7	349.3	132.3	197.1	279.9	707.6	41.9	21.8
1909	138.4	0.0	21.1	210.6	202.4	91.7	111.3	239.8	353.8	535.4	15.2	30.5
1910	37.1	17.8	17.0	29.5	77.7	172.2	130.0	175.3	93.2	544.8	11.4	14.0
1911	46.2	0.0	27.9	256.8	307.8	71.9	103.6	159.3	112.3	89.7	150.9	48.3
1912	108.2	52.8	95.5	142.5	283.7	371.6	152.1	74.4	52.8	83.6	271.0	48.3
1913	112.3	47.2	111.5	96.0	213.9	103.4	75.7	144.0	164.1	114.6	111.5	8.1
1914	34.3	30.7	25.1	133.1	46.2	65.3	114.8	95.8	169.7	175.8	179.3	112.5
1915	92.5	76.5	39.9	33.5	84.3	318.3	166.1	34.8	138.9	295.9	64.5	50.8
1916	36.6	93.7	7.1	9.9	152.1	161.5	63.2	256.5	122.2	127.8	47.0	6.4
1917	2.8	11.4	77.0	95.0	117.3	170.4	63.0	109.7	471.2	53.6	6.1	37.1
1918	21.6	63.8	37.6	114.0	71.1	156.7	101.9	36.3	255.5	122.4	15.2	104.4
1919	27.2	81.3	247.4	78.0	338.1	184.4	149.9	94.7	94.5	94.7	88.4	46.5
1920	10.4	40.6	1.5	80.0	262.4	99.1	167.9	104.6	176.3	128.0	94.7	43.7
1921	18.5	29.2	130.8	66.8	142.2	29.0	78.5	79.8	71.4	462.3	12.7	5.8
1922	14.0	79.8	3.3	13.7	230.1	114.3	207.3	202.4	280.4	402.6	138.2	30.2
1923	5.3	6.1	14.7	54.6	291.6	150.9	132.1	161.0	157.7	70.4	6.9	11.7
1924	71.1	42.9	11.7	86.4	189.2	107.2	211.1	86.4	188.2	635.5	26.9	8.1
1925	121.4	32.3	69.6	76.7	474.0	144.8	65.0	227.3	69.3	28.4	-999.9	68.1
1926	201.4	7.4	7.1	58.2	117.6	82.3	386.6	246.1	307.3	175.8	46.7	5.8
1927	40.6	64.0	22.4	56.6	17.3	61.0	127.0	111.8	224.3	94.7	22.9	13.2
1928	10.7	51.3	11.4	10.7	271.0	156.0	92.7	247.7	431.8	92.2	10.7	18.8
1929	26.2	11.2	134.9	82.3	176.8	142.5	237.7	140.0	427.2	512.6	22.6	229.4
1930	69.1	98.0	95.5	151.9	224.8	643.6	90.9	119.9	128.3	129.3	80.8	35.1
1931	179.6	53.8	154.9	116.6	110.2	1.8	66.8	127.5	500.4	143.8	52.8	37.8
1932	56.9	21.8	47.0	63.0	391.2	215.6	12.2	382.3	226.6	442.7	156.0	14.2
1933	14.5	64.5	42.9	119.6	118.6	238.5	194.1	318.0	127.8	400.8	22.9	15.5
1934	74.7	132.1	32.5	159.3	408.9	242.8	207.8	81.3	246.1	79.8	57.4	24.6
1935	8.1	7.9	5.6	158.2	26.9	157.7	102.9	161.5	225.8	240.0	109.0	13.2
1936	99.8	58.7	94.2	54.6	204.5	543.8	216.4	217.2	118.1	192.8	110.5	52.8
1937	33.0	102.1	179.3	40.6	62.2	97.3	144.8	224.0	431.5	127.0	8.4	10.2
1938	61.5	29.2	8.6	5.8	141.7	143.5	156.2	29.2	287.0	134.1	44.7	69.3
1939	13.0	9.7	33.5	30.2	226.3	55.9	260.4	173.0	115.8	366.3	91.9	81.8
1940	72.4	61.5	83.3	19.3	282.2	343.7	48.8	243.6	452.4	74.4	37.6	100.8
1941	87.6	95.3	127.3	171.2	8.1	153.7	239.8	16.8	178.6	77.2	118.4	30.2
1942	51.3	70.4	63.8	345.9	44.2	353.1	31.5	85.3	158.8	133.9	44.5	60.2
1943	102.6	23.9	83.6	57.4	84.3	144.3	148.8	134.9	151.9	99.3	60.5	47.0
1944	50.8	0.0	34.0	61.5	130.3	56.1	137.9	37.6	73.2	80.5	5.8	60.2
1945	49.0	10.4	17.8	62.0	20.8	52.1	101.9	105.4	197.9	167.9	32.0	60.2
1946	9.9	42.2	56.1	15.2	167.6	104.6	90.4	93.7	116.3	80.0	161.3	54.1
1947	37.3	51.1	41.4	152.9	85.1	232.7	198.1	186.4	346.7	342.6	65.0	17.8

1948	101.3	25.9	13.5	172.2	168.9	140.5	48.5	217.7	584.7	354.1	18.0	38.4
1949	2.8	9.4	183.4	145.3	154.2	263.4	100.6	192.3	230.4	181.6	31.2	83.8
1950	12.7	47.0	16.0	65.3	83.1	97.0	202.9	219.7	97.8	317.0	67.6	30.5
1951	1.0	53.0	12.0	122.0	42.0	129.0	219.0	130.0	67.0	166.0	14.0	27.0
1952	15.0	58.0	51.0	37.0	17.0	52.0	181.0	125.0	114.0	535.0	6.0	51.0
1953	154.0	41.0	21.0	106.0	80.0	137.0	169.0	230.0	333.0	261.0	62.0	60.0
1954	12.0	55.0	50.0	138.0	341.0	258.0	234.0	42.0	210.0	108.0	121.0	12.0
1955	18.0	19.0	6.0	35.0	95.0	246.0	200.0	108.0	140.0	111.0	25.0	47.0
1956	44.0	23.0	1.0	58.0	138.0	100.0	59.0	117.0	244.0	141.0	9.0	7.0
1957	2.0	119.0	68.0	128.0	257.0	148.0	242.0	421.0	84.0	194.0	65.0	72.0
1958	144.0	39.0	131.0	22.0	461.0	166.0	167.0	213.0	122.0	105.0	93.0	162.0
1959	56.0	59.0	123.0	51.0	156.0	522.0	208.0	208.0	330.0	194.0	334.0	28.0
1960	5.0	56.0	17.0	259.0	88.0	160.0	134.0	105.0	620.0	268.0	60.0	13.0
1961	130.0	16.0	49.0	14.0	173.0	266.0	49.0	119.0	86.0	100.0	55.0	3.0
1962	37.0	3.0	71.0	30.0	23.0	263.0	95.0	204.0	199.0	38.0	105.0	5.0
1963	17.0	88.0	19.0	8.0	161.0	173.0	45.0	121.0	282.0	113.0	36.0	108.0
1964	11.0	56.0	13.0	84.0	119.0	266.0	140.0	250.0	107.0	248.0	76.0	158.0
1965	50.0	76.0	101.0	30.0	11.0	166.0	167.0	126.0	289.0	426.0	24.0	16.0
1966	101.0	167.0	83.0	46.0	140.0	543.0	216.0	194.0	203.0	276.0	98.0	19.0
1967	70.0	29.0	91.0	4.0	43.0	406.0	141.0	207.0	233.0	327.0	97.0	35.0
1968	49.0	70.0	22.0	32.0	471.0	568.0	156.0	212.0	282.0	221.0	31.0	3.0
1969	169.0	51.0	50.0	118.0	204.0	290.0	215.0	109.0	209.0	345.0	26.0	29.0
1970	72.1	66.3	55.6	2.0	314.5	190.5	105.2	82.3	162.8	168.1	14.0	4.1
1971	12.7	40.9	17.0	4.3	84.1	137.2	125.2	129.3	204.5	227.1	93.2	95.3
1972	26.7	78.2	65.8	167.6	242.6	307.3	237.7	167.6	161.8	98.6	122.7	77.5
1973	68.3	86.6	35.1	25.1	37.8	118.4	136.1	293.9	197.1	114.8	16.3	73.9
1974	112.3	0.0	11.7	30.0	96.8	131.8	150.1	79.5	46.5	70.9	87.9	32.3
1975	13.2	42.9	6.9	8.6	196.9	205.0	187.7	78.2	119.4	182.9	45.7	10.4
1976	31.5	74.9	6.1	55.4	259.1	143.0	43.4	241.8	152.4	123.2	67.6	29.2
1977	28.4	39.4	38.1	30.0	444.0	99.8	165.9	173.0	145.0	58.7	110.7	53.3
1978	70.9	105.2	58.9	101.3	159.0	204.7	61.5	120.7	100.1	182.9	56.4	40.9
1979	26.9	16.0	9.7	162.6	192.3	64.3	134.4	133.1	311.2	145.3	57.9	73.9
1980	56.1	35.3	32.3	97.8	94.2	118.6	108.0	186.2	115.8	279.1	150.4	2.0
1981	17.5	60.2	23.6	2.5	70.9	62.5	72.4	398.0	501.7	86.4	91.7	4.3
1982	22.4	15.2	68.3	267.7	189.7	289.1	57.7	132.3	97.0	143.3	225.6	38.6
1983	148.3	171.7	91.7	151.1	40.4	303.8	91.4	95.5	166.1	151.4	56.4	74.4
1984	4.8	27.9	94.7	181.9	295.7	231.6	119.9	69.6	313.4	23.9	114.3	6.9
1985	8.6	5.6	63.8	53.1	74.7	161.0	200.4	102.9	154.4	90.9	43.9	52.1
1986	84.6	27.4	167.4	18.8	79.0	301.2	72.9	89.7	113.0	24.1	47.2	71.4
1987	72.1	9.9	108.5	10.0	127.0	50.0	95.5	58.2	259.6	170.7	79.2	109.0
1988	62.2	17.8	26.7	46.0	111.3	263.0	277.0	200.0	78.0	38.0	19.0	3.0
1989	17.0	18.0	23.0	54.0	25.0	275.0	90.0	325.0	148.0	67.0	25.0	16.0
1990	6.0	30.0	58.0	177.0	198.0	174.0	110.0	281.0	89.0	122.0	42.0	26.0
1991	40.0	52.0	59.0	131.0	64.0	191.0	185.0	225.0	284.0	550.0	30.0	5.0
1992	46.0	38.0	68.0	62.0	14.0	335.0	107.0	183.0	165.0	51.0	352.0	49.0
1993	128.0	54.0	152.0	78.0	57.0	93.0	185.0	130.0	320.0	184.0	154.0	12.0
1994	91.0	144.0	49.0	54.0	120.0	126.0	77.0	423.0	343.0	241.0	227.0	126.0
1995	80.0	36.0	117.0	95.0	75.0	516.0	162.0	337.0	263.0	252.0	64.0	22.0
1996	59.0	20.0	38.0	86.0	211.0	296.0	133.0	120.0	183.0	211.0	18.0	26.0
1997	42.0	40.0	53.0	131.0	249.0	335.0	194.0	159.0	316.0	66.0	69.0	134.0
1998	26.0	167.0	150.0	17.0	88.0	169.0	137.0	298.0	367.0	145.0	169.0	50.0
1999	75.7	6.9	6.4	37.1	124.2	281.4	91.4	352.3	178.1	369.6	36.8	68.1
2000	13.2	31.5	8.9	85.3	45.7	131.8	134.4	188.5	268.7	473.7	12.7	156.2
2001	15.2	1.3	120.9	45.5	154.9	227.1	175.8	184.7	456.9	334.3	36.1	77.0
2002	5.6	90.9	22.6	33.5	209.0	391.4	324.1	166.4	164.6	18.3	95.0	86.0
2003	10.9	21.1	98.8	72.9	280.7	303.3	160.5	245.1	334.8	103.9	168.7	31.5
2004	64.0	78.2	38.1	101.6	62.2	172.5	171.2	257.0	277.0	142.0	9.0	13.0
2005	49.0	16.0	101.0	83.0	190.0	447.0	128.0	204.0	252.0	139.0	69.0	25.0
2006	8.0	88.0	28.0	6.0	219.0	179.0	186.0	329.0	425.0	42.0	41.0	79.0
2007	14.0	54.0	69.0	135.0	134.0	387.0	229.0	113.0	209.0	245.0	-999.9	-999.9



Phoenix, Arizona Monthly Mean Temperature (C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1877	11.1	14.7	19.4	20.4	21.6	29.1	33.9	32.8	27.1	19.9	12.3	10.3
1878	8.3	11.3	15.5	18.3	24.6	30.6	34.5	32.3	26.4	21.4	13.8	8.6
1879	9.6	14.8	18.9	20.4	24.2	29.4	32.9	31.9	29.6	21.8	13.7	10.5
1880	10.8	9.9	14.1	19.5	25.5	31.7	32.7	32.3	29.1	20.6	11.3	10.2
1881	7.5	13.0	14.7	20.9	24.5	28.6	31.2	29.7	25.2	19.3	10.8	10.8
1882	6.7	10.6	16.7	19.7	25.4	29.0	33.3	31.7	27.8	21.1	15.3	14.3
1883	8.3	11.2	18.1	17.0	22.1	30.0	31.9	31.9	27.6	19.7	14.6	13.0
1884	10.3	11.4	12.6	17.4	22.1	26.8	31.1	28.9	23.3	22.4	16.3	11.1
1885	10.1	12.7	15.5	18.6	24.2	26.7	31.1	31.7	27.6	21.6	15.1	11.9
1886	10.2	13.8	14.2	18.6	24.2	27.2	33.6	32.4	26.1	20.8	13.6	12.9
1887	10.9	12.1	20.7	21.1	26.3	31.0	33.2	31.8	29.3	21.5	14.3	6.4
1888	8.0	11.8	13.8	21.8	21.3	28.9	32.5	30.8	28.3	21.6	20.4	13.2
1889	8.9	12.2	15.6	21.1	26.1	30.2	33.5	32.9	26.8	21.4	13.6	13.1
1890	8.7	11.4	14.1	17.8	23.0	27.4	33.3	29.8	28.6	22.0	16.6	13.9
1891	9.0	11.3	13.8	18.3	22.5	26.6	32.1	33.4	26.0	21.3	15.2	8.0
1892	10.2	12.8	15.6	17.9	24.1	28.4	29.5	29.8	29.6	21.2	16.4	11.7
1893	12.2	13.4	16.4	19.6	23.7	29.5	33.0	32.5	26.0	18.4	-999.9	13.9
1894	7.6	9.1	15.3	20.1	24.7	25.9	32.2	30.4	26.0	21.4	16.1	11.4
1895	9.9	11.7	15.2	23.8	25.4	28.9	32.1	31.2	27.9	22.0	13.6	9.0
1896	12.0	13.0	16.6	17.6	23.6	31.3	30.9	31.2	28.2	21.5	15.0	12.0
1897	10.4	10.6	12.3	20.1	25.3	28.1	31.8	31.6	28.4	19.9	15.4	9.0
1898	8.2	14.7	13.8	22.0	23.0	29.3	33.3	31.9	28.9	21.8	13.8	9.0
1899	10.0	11.5	15.5	20.4	21.8	29.3	32.6	30.6	30.2	20.3	15.7	11.3
1900	13.2	13.4	18.6	17.2	25.3	30.1	32.6	29.9	25.9	21.7	16.8	11.7
1901	11.6	13.3	15.4	18.6	23.9	28.2	33.7	31.9	27.9	22.7	17.4	10.9
1902	11.2	13.4	14.1	20.9	24.0	30.2	31.3	31.8	28.6	23.2	14.1	10.7
1903	10.8	9.2	15.4	19.0	23.8	29.7	32.1	32.4	27.5	21.5	16.6	11.6
1904	8.9	14.8	17.1	19.9	25.0	30.2	31.2	30.9	26.8	21.4	16.4	11.2
1905	12.7	13.4	15.5	17.9	21.4	28.7	31.8	32.0	28.9	21.8	14.4	9.7
1906	10.4	14.4	15.9	18.4	23.0	28.9	32.8	29.6	27.5	21.8	14.4	12.1
1907	10.7	14.9	15.4	20.3	22.4	27.1	31.7	30.7	28.1	21.3	15.1	11.2
1908	11.7	12.2	16.1	19.7	21.9	27.7	31.3	30.8	27.5	19.2	16.0	11.4
1909	12.9	11.8	13.7	19.4	22.8	29.3	31.3	30.2	27.1	21.6	14.8	8.6
1910	10.4	12.1	18.6	21.1	26.2	29.5	31.8	31.8	30.0	22.2	15.3	12.2
1911	12.7	11.5	17.5	19.6	23.4	28.8	29.8	30.7	28.4	20.4	13.9	7.8
1912	11.4	13.3	14.7	17.2	23.2	30.0	29.5	29.9	25.9	19.8	15.1	9.1
1913	8.2	11.6	13.7	19.5	23.2	27.7	30.0	30.2	27.5	20.7	16.1	10.1
1914	12.4	12.7	17.5	20.2	24.2	29.2	31.4	31.6	29.1	21.6	17.4	9.8
1915	9.8	11.9	14.7	19.1	21.6	28.6	30.6	31.5	26.5	23.1	14.8	10.6
1916	10.2	15.2	17.7	20.1	23.3	28.8	31.5	30.3	27.1	18.8	12.9	8.1
1917	9.2	11.9	13.4	17.8	20.6	29.1	32.1	30.4	28.3	22.4	15.7	12.2
1918	9.6	12.7	16.8	19.7	22.3	31.4	31.1	29.0	27.9	21.9	13.7	9.4
1919	10.2	10.5	14.1	20.6	24.9	29.7	31.1	31.2	27.4	19.1	13.6	12.0
1920	11.6	14.1	14.6	18.1	24.4	29.1	32.4	30.0	26.8	19.3	14.4	9.5
1921	10.9	14.1	18.1	18.9	23.1	29.3	31.6	30.4	28.0	23.1	15.7	13.0
1922	9.0	12.3	13.8	17.3	24.7	30.1	32.4	31.7	29.3	21.8	12.4	12.4
1923	12.8	12.8	14.9	19.2	25.3	27.1	31.6	30.4	26.7	19.4	14.7	10.8
1924	10.0	14.7	13.6	18.3	26.0	30.8	32.2	31.7	29.7	21.6	16.8	10.8
1925	10.9	15.7	18.3	21.5	27.3	30.1	33.6	30.4	26.8	20.1	14.0	11.6
1926	9.7	14.3	17.7	20.3	24.3	30.6	31.8	31.4	28.4	22.9	16.1	10.3
1927	13.2	14.7	15.0	19.6	24.4	28.7	32.8	30.8	28.0	21.8	17.0	10.2
1928	11.6	12.7	17.8	19.8	26.3	29.8	33.1	31.1	29.4	22.4	15.3	10.4
1929	9.8	11.5	15.7	18.9	25.6	30.2	33.2	31.8	28.8	23.6	14.1	13.2
1930	10.9	15.6	15.8	22.3	22.1	30.4	32.8	31.8	27.8	21.2	15.3	10.9
1931	11.4	14.2	17.1	22.4	26.9	30.6	34.9	31.6	29.8	22.5	13.7	9.5
1932	8.1	13.6	16.6	20.6	25.2	29.4	33.1	33.2	30.4	21.8	16.9	9.3
1933	9.0	9.6	16.6	18.1	22.6	30.9	34.8	33.3	30.3	24.7	16.7	12.2
1934	12.3	15.8	21.1	23.7	28.4	28.8	34.3	32.0	29.2	24.0	16.0	13.0
1935	11.9	14.2	14.2	20.7	23.4	31.8	33.2	31.1	29.1	22.4	13.7	12.1
1936	11.3	13.4	18.1	22.8	27.6	32.4	33.8	32.6	28.6	22.7	16.2	11.4
1937	6.0	12.4	15.4	19.7	25.9	29.6	33.1	33.2	30.4	23.6	16.5	13.5
1938	12.6	13.4	15.2	20.5	24.5	29.9	32.2	31.9	30.3	21.8	13.0	12.9
1939	11.1	9.1	16.8	21.7	26.0	29.9	33.4	32.1	27.9	21.4	17.6	13.9
1940	12.9	13.6	18.2	21.1	27.5	31.6	32.9	32.6	29.4	22.9	14.6	13.4
1941	12.4	14.7	15.4	17.2	24.7	28.2	31.9	30.4	26.9	19.9	16.4	12.0
1942	12.3	11.4	15.0	19.0	24.0	29.4	33.6	31.3	29.4	22.2	17.2	13.0

1943	11.7	15.1	17.7	22.1	26.1	29.1	33.2	31.1	29.7	22.6	16.2	11.8
1944	10.8	11.3	14.4	18.2	24.2	27.3	32.0	32.6	28.7	23.7	14.1	11.9
1945	10.8	13.3	13.9	19.1	24.4	28.0	32.6	31.9	29.3	23.7	14.8	10.3
1946	10.5	12.1	16.6	23.1	24.8	31.0	32.3	31.9	29.1	19.6	13.0	12.9
1947	10.1	15.4	17.5	20.6	26.5	29.2	33.7	31.1	30.7	23.2	13.3	10.2
1948	11.8	11.9	13.8	20.9	25.0	29.4	32.7	32.8	30.0	23.5	13.6	10.8
1949	6.8	11.4	15.7	22.0	24.9	30.2	32.6	31.2	30.4	20.9	18.7	11.3
1950	10.5	15.4	17.3	22.7	24.4	29.4	31.7	31.9	27.6	25.7	18.2	14.6
1951	11.1	13.4	15.9	19.9	24.8	28.3	33.6	30.7	28.4	22.2	14.8	11.2
1952	10.8	12.3	13.1	19.7	26.4	29.2	32.2	32.7	29.9	24.9	13.9	10.6
1953	12.5	11.8	16.4	19.2	21.6	29.4	32.7	31.8	28.9	22.0	16.4	9.6
1954	11.3	16.2	14.6	22.0	25.7	29.3	32.9	31.3	30.1	23.8	18.1	12.2
1955	9.3	10.5	16.4	19.3	24.2	28.7	30.4	30.3	28.3	24.3	15.1	13.2
1956	13.3	10.5	16.4	18.9	24.9	30.5	31.1	29.9	29.2	20.9	14.3	11.8
1957	12.2	16.3	16.6	19.2	22.7	30.6	33.0	31.1	28.4	21.4	13.6	12.8
1958	11.7	14.4	13.9	19.3	27.4	31.7	34.2	33.7	30.3	24.8	16.3	13.3
1959	12.1	12.2	17.6	23.1	24.6	32.4	34.4	31.2	28.5	22.6	16.1	12.0
1960	9.2	10.8	18.4	21.3	25.4	32.2	33.6	32.1	29.9	21.4	15.8	10.3
1961	12.3	13.1	15.3	20.7	24.2	31.4	33.2	31.4	27.0	20.9	13.9	11.3
1962	10.8	13.2	13.3	22.4	23.1	28.4	32.3	33.2	29.1	22.0	16.6	12.8
1963	9.1	15.7	16.1	18.8	26.7	27.6	33.3	30.6	29.5	24.6	16.6	11.0
1964	8.2	9.6	13.6	18.4	23.2	28.1	32.6	30.1	27.2	23.8	13.1	11.1
1965	11.5	11.3	13.4	17.4	22.1	26.1	32.8	31.7	26.2	23.2	16.7	11.6
1966	9.0	9.8	16.2	21.0	26.7	30.4	33.9	32.7	28.3	21.6	15.8	11.1
1967	10.4	13.2	17.1	16.9	23.9	27.3	33.1	32.8	29.3	23.1	17.7	9.0
1968	11.3	15.4	15.5	19.3	24.8	30.1	32.3	30.3	28.7	22.6	15.1	9.7
1969	12.7	11.7	13.8	20.3	25.7	29.0	33.9	34.7	30.0	20.8	16.7	12.7
1970	11.2	15.7	15.3	18.2	26.4	31.2	35.0	33.6	27.9	20.6	16.3	11.4
1971	11.2	13.5	17.4	19.2	22.9	29.6	34.9	32.0	29.8	20.7	15.4	10.1
1972	10.8	15.1	21.4	21.9	25.7	31.0	34.7	32.2	29.3	22.2	14.5	11.2
1973	10.7	14.2	13.7	19.6	27.2	31.2	34.2	34.1	29.3	23.6	16.0	13.0
1974	12.2	13.7	18.1	21.4	26.8	33.4	33.6	32.9	30.7	24.4	16.4	10.3
1975	11.3	12.2	15.0	17.0	24.8	30.3	34.6	33.3	30.1	22.7	16.1	12.7
1976	13.0	15.9	16.4	20.4	27.1	31.1	33.1	32.6	28.3	23.3	17.8	13.1
1977	12.1	16.5	16.0	23.1	24.3	33.0	35.0	34.5	30.9	25.9	18.8	15.5
1978	13.7	14.8	18.7	20.7	25.8	32.7	34.8	33.0	30.2	25.9	16.4	10.9
1979	10.1	13.2	15.8	21.2	25.6	31.9	34.3	31.9	32.3	25.1	14.6	13.3
1980	13.7	15.9	15.9	21.0	24.4	31.6	35.3	33.4	30.7	24.2	17.8	16.3
1981	15.1	16.3	17.7	24.4	23.0	34.1	35.1	35.4	31.8	23.1	18.9	14.8
1982	12.2	15.6	16.9	22.5	26.9	31.2	34.3	34.3	30.4	23.1	16.6	12.3
1983	13.3	14.7	16.8	19.2	27.0	31.4	35.3	33.7	32.8	25.1	16.9	14.0
1984	14.1	15.6	19.8	21.5	30.6	31.6	33.2	32.9	30.8	21.9	16.6	12.1
1985	12.4	14.1	17.1	23.9	29.0	33.6	34.9	34.7	27.9	23.9	16.3	13.3
1986	16.3	16.1	20.7	23.4	27.9	33.8	33.5	34.7	28.9	23.7	18.3	13.6
1987	12.8	15.6	17.2	25.6	28.1	33.9	33.9	33.5	30.5	27.2	17.2	11.7
1988	12.8	16.9	19.1	22.8	27.5	33.9	35.7	34.4	30.8	28.0	18.0	13.2
1989	12.4	16.6	21.2	26.7	28.4	33.4	36.3	34.3	32.2	25.2	19.1	13.9
1990	13.1	13.7	19.6	24.6	27.3	34.3	34.2	32.7	30.9	25.9	18.8	12.0
1991	13.3	18.9	15.7	22.3	26.5	31.0	35.1	34.7	31.4	26.8	17.5	14.1

Phoenix, Arizona Monthly Precipitation Totals (mm)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1896	11.7	1.3	9.9	1.3	0.0	0.0	108.0	45.0	30.0	25.9	16.3	17.0
1897	93.2	11.9	13.5	0.0	0.3	0.0	15.0	15.5	93.2	3.8	0.0	4.3
1898	41.4	0.0	0.8	4.6	0.3	2.0	6.1	26.2	1.0	0.0	25.7	43.2
1899	32.5	2.5	0.0	0.0	0.0	19.1	22.1	22.6	9.4	7.6	14.0	2.0
1900	2.8	1.0	5.6	28.4	3.0	0.0	43.2	0.3	3.0	5.6	43.9	0.0
1901	10.9	37.1	8.4	0.0	2.5	0.0	8.9	43.9	0.0	11.7	0.3	0.0
1902	20.1	2.5	11.7	0.0	0.0	3.0	8.1	14.2	37.1	0.0	51.1	26.9
1903	0.0	16.3	10.7	11.4	0.0	4.6	17.8	17.8	80.3	5.6	0.0	3.6
1904	2.8	6.6	3.0	0.0	0.0	0.0	48.0	40.9	31.2	0.0	0.0	8.9
1905	84.1	117.9	60.5	65.8	1.0	3.8	7.1	23.4	31.2	0.0	91.7	14.7
1906	8.9	25.1	17.0	12.2	0.0	0.0	5.1	52.6	0.0	0.0	30.5	65.8
1907	29.2	6.6	23.6	8.9	6.9	0.0	55.4	20.3	0.5	50.8	5.3	0.0
1908	8.9	47.5	10.4	22.9	0.8	0.0	75.7	20.6	13.0	13.2	9.1	49.3
1909	2.3	17.3	17.0	1.8	0.0	0.0	25.4	49.3	10.7	0.0	7.1	25.9
1910	12.7	0.0	15.5	7.4	0.0	0.0	16.5	3.6	0.0	4.6	40.9	8.6
1911	29.0	16.8	16.3	0.5	0.0	0.0	164.3	42.7	29.5	56.9	0.0	2.8
1912	0.0	0.0	49.8	13.2	14.7	0.3	32.8	18.3	3.6	20.8	0.0	21.1
1913	9.7	49.0	1.8	13.0	0.0	0.0	23.9	8.1	3.3	0.3	21.1	6.9
1914	7.6	18.0	23.4	2.5	0.0	1.3	5.3	7.6	0.0	58.4	25.4	78.5
1915	45.5	30.7	8.4	22.4	4.3	12.2	28.4	6.4	2.5	0.0	13.7	64.5
1916	59.4	3.3	9.4	3.8	0.0	0.0	19.6	7.6	42.2	16.5	0.0	9.9
1917	55.9	24.1	3.8	31.0	11.4	0.0	100.8	2.8	14.0	0.0	0.0	0.0
1918	29.0	11.4	23.6	0.5	0.0	2.0	25.9	88.1	9.9	13.2	48.8	29.5
1919	5.6	19.1	24.6	4.3	1.5	0.0	26.7	61.0	49.0	6.4	60.5	3.3
1920	36.1	37.1	34.3	0.0	10.7	0.0	6.4	19.1	2.5	11.7	0.0	0.0
1921	3.3	2.8	0.8	0.5	4.3	1.0	9.7	41.1	8.4	2.8	1.0	22.1
1922	32.8	10.7	25.1	6.1	6.6	0.0	18.8	14.5	3.3	0.0	26.4	7.1
1923	7.1	11.7	27.4	1.3	2.0	0.0	19.6	16.5	24.6	5.6	72.1	56.6
1924	0.0	0.0	25.1	5.6	0.3	0.0	2.3	3.6	3.0	7.6	0.0	29.5
1925	0.8	0.5	8.4	13.0	0.8	5.3	0.8	15.5	24.1	23.4	3.0	10.2
1926	25.4	2.5	41.4	85.3	4.6	0.0	33.3	2.8	89.4	1.8	0.3	68.1
1927	0.3	26.9	6.1	8.9	4.3	3.3	6.1	17.5	21.1	14.5	3.6	33.0
1928	0.0	33.8	3.3	0.0	0.8	0.0	2.8	37.3	11.2	38.4	4.1	25.7
1929	23.4	7.1	3.3	10.9	0.3	0.0	20.1	53.1	4.8	2.3	2.8	0.0
1930	42.9	4.8	45.0	5.1	33.3	4.1	17.3	21.8	13.0	4.1	13.0	0.0
1931	0.5	94.2	1.8	10.2	0.0	0.5	0.5	43.2	5.8	5.6	80.8	19.1
1932	2.5	53.8	1.3	1.3	0.0	5.8	2.8	2.5	8.6	43.9	0.0	46.7
1933	58.7	3.8	0.0	28.2	0.0	5.8	7.6	9.7	41.1	9.7	15.7	0.0
1934	10.2	25.1	2.5	1.8	2.5	0.8	2.8	27.2	16.8	0.0	16.0	43.4
1935	24.1	80.8	35.3	2.3	3.6	0.0	23.6	32.3	33.0	3.3	14.2	9.9
1936	20.3	25.7	12.7	3.6	0.0	0.0	63.2	8.1	10.9	3.3	8.9	53.8
1937	21.1	19.3	40.1	0.0	2.0	0.0	12.4	1.3	29.7	0.0	0.0	10.4
1938	13.2	14.0	22.6	0.0	0.0	7.1	6.4	28.2	0.0	0.0	0.0	29.0
1939	4.6	22.6	3.8	4.3	0.0	0.0	18.0	21.3	137.4	0.5	19.1	0.0
1940	1.0	15.5	0.0	2.3	0.3	0.0	16.8	12.2	36.3	33.0	2.8	95.3
1941	26.4	45.2	122.4	53.8	19.3	0.0	35.3	11.2	45.5	12.7	32.0	34.5
1942	8.9	6.1	7.1	19.3	0.0	0.0	31.5	17.3	5.3	10.9	0.3	9.1
1943	18.5	1.8	18.5	3.6	0.0	0.3	6.4	125.0	24.6	4.3	0.0	48.0
1944	11.9	53.3	24.1	12.7	20.3	0.0	17.8	2.3	1.8	9.1	28.7	27.7
1945	25.1	3.0	20.8	0.0	0.0	0.0	23.6	10.4	0.0	17.5	0.0	7.9
1946	29.7	2.8	0.5	1.0	0.0	0.0	65.0	51.1	73.2	1.3	14.7	11.4
1947	0.8	2.5	0.0	0.0	9.7	0.0	3.3	30.7	9.9	1.5	15.2	8.1
1948	0.0	27.7	4.1	0.0	0.0	2.8	20.1	6.4	0.0	24.4	0.0	14.7
1949	40.9	2.0	9.7	4.6	4.3	3.6	9.1	10.4	22.6	20.3	7.6	23.4
1950	8.1	25.4	6.4	0.0	0.0	2.5	23.6	11.4	22.1	0.0	0.8	0.3
1951	40.0	7.0	11.0	26.0	5.0	0.0	27.0	141.0	8.0	13.0	19.0	16.0
1952	14.0	7.0	56.0	49.0	0.0	2.0	14.0	28.0	6.0	0.0	77.0	17.0
1953	6.0	13.0	19.0	1.0	18.0	0.0	22.0	8.0	0.0	0.0	2.0	2.0
1954	22.0	15.0	31.0	1.0	3.0	1.0	9.0	14.0	11.0	3.0	0.0	0.0
1955	61.0	2.0	0.0	0.0	1.0	24.0	106.0	46.0	0.0	3.0	1.0	5.0
1956	17.0	16.0	0.0	1.0	0.0	0.0	23.0	12.0	1.0	2.0	0.0	0.0
1957	40.0	5.0	13.0	3.0	11.0	7.0	18.0	22.0	0.0	68.0	1.0	6.0
1958	2.0	29.0	49.0	23.0	2.0	1.0	8.0	18.0	57.0	13.0	4.0	0.0
1959	6.0	16.0	0.0	1.0	0.0	0.0	11.0	35.0	1.0	44.0	11.0	88.0
1960	22.0	1.0	14.0	0.0	0.0	0.0	6.0	21.0	3.0	17.0	0.0	2.0
1961	6.0	0.0	10.0	0.0	0.0	0.0	10.0	54.0	6.0	2.0	3.0	22.0

1962	30.0	21.0	13.0	0.0	0.0	3.0	3.0	6.0	10.0	0.0	1.0	12.0
1963	14.0	29.0	8.0	8.0	0.0	0.0	1.0	68.0	0.0	37.0	19.0	0.0
1964	6.0	0.0	9.0	3.0	0.0	0.0	15.0	33.0	46.0	4.0	9.0	28.0
1965	31.0	23.0	35.0	34.0	4.0	-999.9	4.0	5.0	15.0	5.0	23.0	81.0
1966	9.0	24.0	9.0	0.0	0.0	6.0	2.0	55.0	51.0	6.0	10.0	13.0
1967	6.0	0.0	11.0	2.0	1.0	12.0	25.0	1.0	3.0	17.0	32.0	101.0
1968	5.0	30.0	26.0	0.0	0.0	0.0	43.0	15.0	0.0	9.0	23.0	18.0
1969	35.0	20.0	14.0	1.0	7.0	0.0	7.0	4.0	54.0	2.0	17.0	17.0
1970	0.0	7.6	57.4	0.0	0.0	0.0	12.2	25.9	72.4	11.2	0.5	6.6
1971	5.6	8.9	0.0	3.3	0.0	0.0	6.1	25.1	23.4	6.9	0.0	11.9
1972	0.0	0.0	0.0	0.0	0.0	43.2	18.3	30.5	7.1	111.8	25.7	39.6
1973	3.3	34.5	42.9	1.8	2.5	0.0	33.0	0.0	0.0	0.0	34.5	0.0
1974	14.5	0.5	34.8	0.3	0.0	0.0	21.3	29.2	27.2	53.8	11.2	15.0
1975	0.5	8.4	16.0	10.9	0.0	0.0	9.7	0.0	20.8	5.8	14.0	28.4
1976	0.0	11.9	10.2	17.0	26.9	2.3	37.6	3.0	42.9	17.8	10.9	21.6
1977	8.9	1.5	6.9	1.5	4.1	2.5	7.6	4.6	13.5	15.5	0.0	13.7
1978	59.2	56.1	54.4	5.1	0.0	0.3	36.6	45.5	0.0	8.9	58.4	62.5
1979	54.9	2.3	45.2	0.5	19.3	1.0	8.6	30.0	2.3	2.3	3.0	3.3
1980	40.1	53.1	21.8	11.2	5.3	0.8	14.2	1.5	3.3	0.5	0.0	2.0
1981	18.0	27.4	24.9	5.1	0.8	0.0	29.0	2.8	4.6	34.0	24.1	0.0
1982	20.6	17.0	33.0	0.0	12.7	0.0	10.9	50.0	3.0	0.0	63.5	41.7
1983	17.8	29.7	80.5	4.6	0.0	0.0	9.7	63.0	61.7	18.0	10.9	29.5
1984	7.9	0.0	0.0	23.1	4.6	4.6	130.8	22.1	85.3	7.9	18.0	74.4
1985	24.1	4.6	11.7	4.3	0.0	0.0	24.9	5.3	40.6	23.4	40.4	21.8
1986	1.8	30.2	40.1	0.3	0.0	0.3	30.2	32.3	11.9	10.4	0.8	35.1
1987	17.0	52.3	7.1	2.3	1.5	0.3	27.4	11.4	14.5	11.9	26.4	41.1
1988	22.9	5.8	4.3	27.7	0.0	0.5	22.1	16.0	0.0	60.5	19.8	3.6
1989	30.2	0.0	31.8	0.0	0.0	0.0	3.3	28.2	11.9	11.7	3.6	4.8
1990	20.0	18.0	9.0	4.0	4.0	1.0	27.0	69.0	28.0	1.0	4.0	12.0
1991	16.0	14.0	52.0	0.0	0.0	0.0	4.0	3.0	21.0	30.0	32.0	41.0
1992	41.0	23.0	63.0	12.0	27.0	1.0	75.0	33.0	1.0	7.0	1.0	78.0
1993	133.0	44.0	41.0	0.0	2.0	0.0	0.0	14.0	2.0	32.0	71.0	1.0
1994	3.0	14.0	35.0	2.0	10.0	0.0	0.0	1.0	44.0	14.0	17.0	77.0
1995	35.0	9.0	26.0	7.0	2.0	0.0	0.0	89.0	27.0	0.0	44.0	0.0
1996	6.0	26.0	14.0	0.0	0.0	0.0	25.0	9.0	14.0	9.0	6.0	-888.8
1997	22.9	14.0	0.3	6.1	-888.8	-888.8	4.3	35.3	11.4	1.8	1.5	21.1
1998	8.9	74.4	33.3	10.9	1.0	0.0	49.3	26.7	14.7	26.2	4.8	17.3
1999	0.3	4.3	2.8	28.7	0.0	-888.8	75.2	23.4	33.3	0.0	0.0	0.0
2000	0.3	-888.8	75.7	0.0	0.0	8.6	7.1	14.7	0.3	80.5	12.7	0.0
2001	45.0	21.8	19.6	26.9	0.5	0.3	17.0	11.7	0.0	0.5	5.1	22.4
2002	1.3	0.0	2.0	1.5	0.0	-888.8	30.0	-888.8	12.7	9.4	11.0	4.0
2003	14.5	80.0	13.0	4.3	0.0	0.0	15.5	13.0	6.4	5.3	16.5	4.8
2004	20.8	25.9	32.5	22.9	0.0	0.0	15.0	9.0	4.0	20.0	13.0	40.0
2005	47.0	77.0	9.0	3.0	0.0	0.0	4.0	31.0	4.0	4.0	-999.9	-999.9
2006	-999.9	-999.9	40.0	0.0	0.0	0.0	33.0	32.0	20.0	6.0	-999.9	9.0
2007	12.0	10.0	21.0	5.0	0.0	0.0	9.0	8.0	2.0	1.0	-999.9	-999.9

